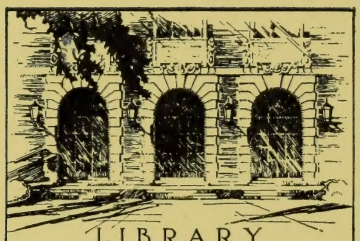

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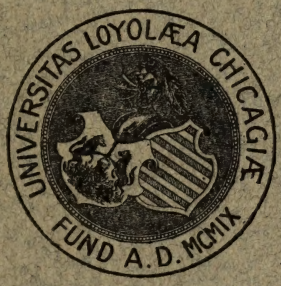
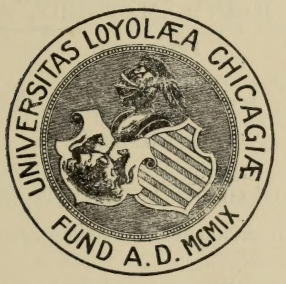


CATALOGUE
1913

LOYOLA UNIVERSITY

ST. IGNATIUS COLLEGE



DEPARTMENT OF ARTS AND SCIENCES

1913

1076 W. Twelfth Street
Chicago

BOARD OF MANAGERS

Rev. JOHN L. MATHERY, S. J.,
PRESIDENT.

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VICE PRESIDENT.

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CHANCELLOR AND SECRETARY.

Rev. ALBERT F. ESTERMAN, S. J.,
TREASURER.

Rev. JOHN J. MASTERSON, S. J.

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OFFICERS OF THE COLLEGE

Rev. JOHN L. MATHERY, S. J.,
PRESIDENT.

Rev. GEORGE J. LEAHEY, S. J.,
VICE PRESIDENT, PREFECT OF STUDIES AND DISCIPLINE.

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EDWARD J. KIEFFER, M. D.,
PHYSICIAN.

JOHN B. MURPHY, A. M., M. D., LL. D.,
SURGEON.

GEORGE W. MAHONEY, M. D.,
OCULIST.

College of Arts and Sciences

PROSPECTUS.

Charter.—St. Ignatius College was erected in 1869 for the higher education of the Catholic youth of Chicago and vicinity. It is conducted by Fathers of the Society of Jesus. A charter was granted to the institution by the Legislature of the State of Illinois, June 30, 1870, with power to confer the usual degree in the various faculties of a University. On November 21, 1909, the college became the Department of Arts and Sciences of Loyola University.

Legal Title.—The legal title of the College for the purposes of bequests and donations is

ST. IGNATIUS COLLEGE OF CHICAGO, ILLINOIS.

Curriculum.—The studies pursued in the College comprise the Doctrines and Evidences of the Catholic Religion, Logic, Metaphysics, Ethics, Astronomy, Physics, Chemistry, Botany, Biology, Physiology, Mathematics, Rhetoric, Composition, Elocution, History, the Latin, Greek, English, German and French Languages and Literature.

Location and Buildings.—St. Ignatius College is located at 1076 West Twelfth Street. Its central location makes it easy of access even from the remotest sections of the city. The buildings contain valuable Mineralogical and Natural History Museums, and a library of 50,000 volumes, a department of which is reserved for the students. The class-rooms are well lighted and comfortable; there is a gymnasium, provided with lockers and shower-baths, and, in general, the College has all the equipment needed for the convenience, comfort, and mental and physical development of the students. The Department of Physics has an ample lecture room, and laboratories fitted with all the up-to-date apparatus required for experimental purposes. The Department of Chemistry, in addition to its lecture room, has

eight large slate-topped tables for qualitative analysis, so arranged as to accommodate eighty students.

Classical High Schools.—The better to secure the results aimed at in its educational work, and to arrange a more perfect co-ordination between High School and Collegiate studies, the University has deemed it advisable to maintain a closely affiliated system of Classical High Schools. Their purpose is to fit their pupils to meet the College entrance requirements by offering a programme of studies based upon those fundamental principles which, in the judgment of the Faculty, underlie alike the work of the High School and the College. At present these schools number two: The St. Ignatius Academy, 1076 W. Twelfth Street, and Loyola Academy, Hayes and Sheridan Road.

GENERAL REGULATIONS.

No Boarding.—The College is intended for day scholars only. Students who live at a distance are not advised to take lodgings in the city, unless they are of a mature age and of a steady disposition.

Entrance.—Candidates for entrance are examined and placed in the class for which their previous attainments have qualified them; and they are expected to bring testimonials from the school which they have last attended.

No one is barred from matriculation on account of his religious opinions, though all are required to show a respectful demeanor during the ordinary exercises of public prayer.

Distribution of Time.—The Academic Year consists of one session, beginning the first week of September and ending in the latter part of June, when the Annual Commencement, the Conferring of Degrees and the Distributions of Premiums take place.

The College is open every morning at half-past 7 o'clock. Those who come before the time of class proceed at once to the class-rooms and spend the interval in private study. All are required to be present five minutes before half-past 8 o'clock, at which hour the Catholic students hear Mass. The regular

class exercises begin immediately after Mass and close at 3 p. m.

Thursday is the weekly recreation day.

Attendance.—As regular attendance is an important element in class-standing and an essential condition for successful work, students must not be detained or withdrawn from classes except for very grave reasons. For absence, or for permission to withdraw before the close of the daily session, a note from the parent or guardian will invariably be required. Mere absence does not excuse a student from the obligation of preparing his ordinary recitation or relieve him from any part of his examinations. Frequent absence or tardiness, except on account of sickness, is sufficient cause for dismissal. Students are required to be present eighty-five per cent of the school year to merit promotion in June.

Sickness, however, will be considered a valid excuse, provided a doctor's certificate be presented after an absence of a week or longer.

Home Study.—All the endeavors of the Faculty will fail to insure success for the students unless they apply themselves to their studies with diligence and constancy outside of class hours. Approximately twenty-five hours each week are spent in class work; and to prepare recitations and exercises for this work, as well as to review the matter previously seen, at least three hours of home study daily are required. Parents and guardians are, therefore, respectfully urged to insist on this application.

Communications.—Due notice should be given to the Vice-President of a change of residence, or of the contemplated withdrawal of a student.

Examinations and Premiums.—Written competitions are made by the students three times a year. The class-standing of the students, as well as the honors and premiums, are determined partly by these competitions and partly by the daily class-work, each counting one-half.

These competitions take place at the end of the months of November, January and March, the first two being followed by

a public distribution of premiums and the reading of the percentages obtained by the students.

The medals and prizes given on Commencement Day are awarded in accordance with the results of the quarterly competitions. These prizes are: the medal of excellence for the highest average in the class; first and second honors for a yearly percentage of 90 and 85, respectively. Markings are on the scale of 100. An average below 75 shows an unsatisfactory standing; an average below 70 is failure to pass.

Discipline.—Though the government of the Institution is mild rather than severe, yet, for the maintaining of order and discipline, without which there can be no training nor development of character, the students are required to be obedient, earnest in study, punctual, and refined of manner; any serious neglect in these essential points rendering the offender liable to effective correction and even to dismissal.

Conduct Outside the Premises.—For faults committed outside the premises, the officers of the College do not consider themselves responsible, as students cease then to be under their jurisdiction; still, in justice to the reputation of the College, the authorities will hold students strictly accountable for offenses of this nature.

Luncheon.—Dining rooms have been fitted up for the students, and placed in charge of a reliable caterer, so that students who desire a warm luncheon at the noon hour may be able to obtain it without leaving the premises.

Students are not allowed to leave the premises between the sessions without a written request from their parents or guardians to take lunch elsewhere.

EXPENSES.

Since the institution is not endowed, it is entirely dependent for support on the fees paid for tuition.

Tuition per session of ten months, for all classes, $60.

Students of General Chemistry and Physics pay $10 per session.

Students engaged in Laboratory work deposit $5 with the Treasurer at the beginning of the Course, to pay for chemicals and breakage.

Library fee of $1 for all.

Diplomas for Graduates in the Classical Course, $5.

For each conditional examination taken on the appointed day, a charge of $1 is made; if taken at another time, the charge is $2.

Payments for conditioned examinations must be made invariably before the examinations.

No extra charge is made for instruction in French, German or Vocal Culture.

The session is divided into quarters, which begin, respectively, about the 1st of September, the 15th of November, the 1st of February and the 15th of April.

Payments must be made quarterly or semi-annually in advance. No deduction is allowed for absence.

DEGREES.

According to the Act of the Legislature, under which St. Ignatius College was incorporated, its Board of Managers has power "to confer such academic degrees and honors as are conferred by colleges and universities of the United States."

DEGREES IN REGULAR COURSE.

The degree of Bachelor of Arts (A. B.) is conferred upon those who successfully complete the course outlined below.

The degree of Bachelor of Science (B. S.) is conferred upon those students who have satisfactorily completed the combined College and Medical course—six years; also on those who have completed the four years' College Course, with the exception of either Latin or Greek or both, in place of which studies one modern language for two years and a group of subjects from the Natural Sciences and Mathematics, assigned by the Dean of the College.

For the degree of Bachelor of Literature (Litt. B.) or Bachelor of Philosophy (Ph. B.) four years of college work are required. The candidate must do special work in English, in one modern language, and in philosophy. He must pass all examinations, written and oral, with due credit, and submit a thesis.

The degree of Master of Arts (M. A.) or Master of Science (M. S.) can be obtained by one year of graduate study in residence. Examinations and a written thesis are required for these degrees.

No degrees will be given to those who have not satisfied their obligations to the institution.

Honorary degrees are conferred at the discretion of the Board of Trustees upon those who have distinguished themselves in literature, science, or the professions.

COMBINED COURSE.

Announcement.—In the College Course proper, an outline of which is given below, the prescribed studies for Junior Year are English, Logic, Metaphysics, Psychology and Evidences of Christianity—a total of fourteen hours; the prescribed studies for Senior Year are English, Ethics, Theodicy and Evidences of Christianity—a total of eleven hours. Students who desire an A. B. or a B. S. degree must devote eight hours a week to elective studies in the Junior Year and eleven hours a week in the Senior Year. With the approval of the Vice-President of the College, the elective branches may be taken from the studies mentioned in the "Outline of the College Course." But candidates for the combined course of A. B. or B. S., that is, those who intend to take up Law or Medicine, in combination with a College Course, may elect, during their Junior and Senior Years at College, equivalent work to be done in the School of Medicine or Law. At the end of their Senior College Year they will receive their A. B. or B. S. degree, due credit being given them in the School of Medicine and Law, for the work they have accomplished there during their Junior and Senior Years at College.

SCHOLARSHIPS.

Friends of education who wish to donate scholarships can found one in perpetuity by giving the sum of Fifteen Hundred Dollars. Sixty Dollars will provide an annual scholarship.

The following are now held by the College:

PERPETUAL.

The Miss Eliza McConville Scholarship.
Memorial Scholarship: Margaret Gertrude Onahan.
Damen Council, 650, Knights of Columbus, Scholarship.
The Hon. William J. Onahan Scholarship.
The Hon. Charles A. Mair Scholarship.
The Hon. Thomas Brenan Scholarship.
Memorial Scholarship: Mrs. Mary White Riordan.
The Henry Venn, A. B., Class of 1906, Scholarship.
Memorial Scholarship: Mr. and Mrs. Pancratius Metz.
The Mr. and Mrs. Michael J. Riordan Scholarship.

ANNUAL.

The De Soto Council, Knights of Columbus, Scholarship.
The Rev. Henry J. Dumbach, S. J., Scholarship: Mr. Andrew Maguire.
The Illinois Council, Knights of Columbus, Scholarship.

SPECIAL PRIZES.

Intercollegiate English Prize.—A purse of $100.00 ($50.00 for the first prize, $20.00 for the second, $15.00 for the third, $10.00 for the fourth, and $5.00 for the fifth) is offered yearly by Mr. D. F. Bremner, of Chicago, for excellence in English essay writing. The purse is open to the competition of the Jesuit Colleges of the Missouri Province, which are:

St. Louis University, St. Louis, Mo.
St. Xavier College, Cincinnati, Ohio.
St. Ignatius College, Chicago, Ill.
St. Mary's College, St. Marys, Kan.
Creighton University, Omaha, Neb.
Detroit College, Detroit, Mich.
Marquette University, Milwaukee, Wis.

St. John's College, Belize, British Honduras.
St. Ignatius College, Cleveland, Ohio.
St. John's University, Toledo, Ohio.
Sacred Heart College, Prairie du Chien, Wis.

Intercollegiate Latin Prize.—For the best Latin essay from competitors of the same colleges, a gold medal is offered by Very Rev. Father Provincial.

The Alumni Medal.—A gold medal for the Highest Honors of the Senior Class is offered by the Alumni Association of Loyola University.

The John Naghten Debate Medal.—Mr. John Naghten has offered a gold medal to be awarded to that member of the Loyola Oratorical Association who shall deliver the best speech in the annual Public Debate of the Society.

The Harrison Oratorical Medal.—A gold medal is offered by Hon. Carter H. Harrison, LL. D., for the best oration delivered in the Oratorical Contest, which is open to the students of the Senior, Junior, Sophomore and Freshman Classes.

The Dumbach Chemistry Medal.—A gold medal is offered in memory of Rev. H. J. Dumbach, S. J., by Mr. Andrew Maguire to the student who makes the best examination in Chemistry.

The Clifford Medal of Excellence.—A gold medal is offered by Hon. R. W. Clifford for the Highest Honors in the collective branches of the Junior Class.

The Murphy Medal of Excellence.—A gold medal is offered by Dr. John B. Murphy for the Highest Honors in the collective branches in the Sophomore Class.

The Gibbons Medal of Excellence.—A gold medal is offered by Hon. John Gibbons for the Highest Honors in the collective branches in the Freshman Class.

The Joseph Magee Elocution Medal.—A gold medal is offered by Mr. Joseph Magee for excellence in Elocution.

SOCIETIES.

St. Ignatius College, like other centers of learning, has always been ready to sanction and encourage such societies as tend to promote the various interests of the students. The following societies in particular are deemed worthy of special mention:

THE ALUMNI ASSOCIATION

was organized February 10, 1895. Its object is to preserve and strengthen the ties of fellow-feeling and friendship among former students of the College, and to afford them an opportunity of showing their attachment and esteem for their Alma Mater. Any graduate or student of the College, or of any Jesuit College or University, may apply for membership.

THE SODALITY

has for its object the cultivation in its members of an earnest religious spirit and a tender devotion to the Mother of God. It was established November 3, 1872. It was aggregated to the Sodality of Rome, under the title of "Our Lady Help of Christians," and under the patronage of St. Aloysius, on the 19th day of January, 1873.

THE LOYOLA ORATORICAL ASSOCIATION

was organized on the 10th of November, 1875. It affords opportunity for acquiring skill in the art of speaking, gives much useful information to its members, and develops in them a taste for literary studies. Many of the former members of this society attribute much of their success in life to the address and readiness of debate which they acquired during their term of membership. The usual exercises at the weekly meetings are the reading of original essays and the discussion of subjects of debate approved by the President.

THE GYMNASIUM AND ATHLETIC ASSOCIATION

was formed to encourage physical exercise, and to create and foster a college spirit among the students. It has a Gymnasium

which is fitted out with suitable apparatus, and in which regular instruction is given by a competent athletic instructor. The football and baseball teams do much to make college life pleasant, and the laurels they are accustomed to win on local fields are much appreciated by their fellow-students.

THE STUDENTS' LIBRARY ASSOCIATION

The Students' Library was established with the view of forming in the students a correct literary taste, and of safeguarding them against the many dangers of indiscriminate reading. Students are strongly encouraged to supplement their regular class work by a judicious course of reading under the direction of their professor. The library has a goodly number of volumes; in connection with the library is a reading room well stocked with the standard magazines of the day.

THE ORCHESTRA

The College Orchestra held its first rehearsal on October 2, 1900. Its purpose is to develop the musical talent of the students, and to encourage them to aim at proficiency in instrumental music.

THE GLEE CLUB

while giving pleasant recreation to its members, adds much to the enjoyment of College celebrations.

THE LOYOLA UNIVERSITY MAGAZINE

published quarterly by the students, is intended to foster literary efforts in the students of the present, to chronicle College doings and to serve as a means of intercommunication with the students of the past.

It was established in 1902.

Officers of Societies

LOYOLA UNIVERSITY ALUMNI ASSOCIATION

PRESIDENT,
JUSTIN F. McCARTHY.
VICE PRESIDENT,
FRANK J. O'BYRNE.
HONORARY VICE PRESIDENTS,
ANTHONY SCHAGER, '70's,
EDWIN J. STUBBS, '80's,
JOSEPH H. FINN, '90's,
JAMES R. QUINN, '00's,
FRANCIS A. FURLONG, '10's.
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AUGUSTINE J. BOWE.
CORRESPONDING SECRETARY,
ROBERT I. PIGOTT.
TREASURER,
M. MALACHY FOLEY.
HISTORIAN,
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EXECUTIVE COMMITTEE,
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EDWARD F. GARRAGHAN, M. D.,
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JOHN K. MOORE,
JOHN T. LILLIS,
FRANK H. HURLEY.
MODERATOR,
REV. WILLIAM P. LYONS, S. J.

SODALITY OF THE BLESSED VIRGIN MARY

DIRECTOR,
REV. JOHN BARLOW, S. J.

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WALTER E. SOMERS . . . . . FIRST ASSISTANT
JOSEPH P. ELLIOTT . . . . . SECOND ASSISTANT
EDWARD AMBERG . . . . . SECRETARY
EDWARD E. CAVERLEY . . . . . TREASURER

SACRISTANS.

JAMES E. KEHOE — JOHN McNAMARA
JOSEPH KERWIN — JOHN PETERSON

CONSULTORS.

EDWARD V. WALSH — LEO McGIVENA
WILLIAM G. DOOLEY — EDWARD MOLLOY
FRANCIS WARZYNSKI — CHARLES E. PECHOUS

LOYOLA ORATORICAL ASSOCIATION.

REV. FRANCIS X. SENN, S. J.,
MODERATOR.

First Term.		Second Term.
JAMES FITZGERALD	PRESIDENT	JAMES FITZGERALD
J. AARON COLNON	VICE PRESIDENT	J. AARON COLNON
EDWARD V. WALSH	SECRETARY	EDWARD V. WALSH
THOMAS CLENNON	TREASURER	JAMES MOLLOY
LOUIS D. MOORHEAD	SERGEANT-AT-ARMS	EDWARD J. AMBERG

THE LOYOLA UNIVERSITY MAGAZINE.

JAMES FITZGERALD, '13, EDITOR.

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WALTER A. WADE, Law — WILLIAM HICKEY, Pharmacy

BUSINESS MANAGER.

EDWARD J. DUFFY,

GENERAL ANNOUNCEMENTS FOR 1913-1914.

Matriculation.—In order to facilitate the examination of new students, parents are requested to enter their sons as soon as possible after August the 15th. Office hours from 9 to 12 a. m.

Examination of Conditioned Students will take place on the following dates:

Tuesday, August 26.—Latin, Greek and English.

Wednesday, August 27.—History, Mathematics and Science.

Entrance Examinations will be held on Friday, August 29, and Saturday, August 30.

Fall Term.—Registration.—September 4, 5, 6. Classes begin Monday, September 8.

FACULTY

Rev. PATRICK A. MULLENS, S. J.,
Senior Philosophy.

Rev. FRANCIS X. SENN, S. J.,
Junior Philosophy.

Rev. JOHN E. BARLOW, S. J.,
Sophomore.

Rev. WILLIAM P. LYONS, S. J.,
Rev. PAUL M. BREEN, S. J.
Freshman.

Rev. JAMES L. McGEARY, S. J.,
Physics, Mathematics.

Rev. EDWARD J. CALHOUN, S. J.,
Chemistry, Mathematics.

Rev. CHARLES COPPENS, S. J.,
French, Evidences of Religion, History of Philosophy.

Rev. AUGUSTINE M. EFFINGER, S. J.,
Political Economy, History.

The College

The College Course extends through four years and embraces instruction in the departments of Philosophy, Language, Literature, History, Science, and Mathematics. The aim of the course is to give the student a complete liberal education, which will train and develop all powers of the mind, and will cultivate no one faculty to an exaggerated degree at the expense of the others. The college ideal is not to foster specialization, but to cultivate the mind, to build up and strengthen true character, and to impart that accuracy of thought and reasoning and that breadth of view which must ever be the foundation as well of more advanced scholarship as of eminence in the professions or other stations in life.

To attain this end, the studies prescribed in this course, and leading up to the degree of Bachelor of Arts, are regarded as fundamental and essential in a liberal education, and therefore are not left to the student's option. It is especially to be noted that practically all the studies in the Freshman and Sophomore years are prescribed. Only in the Junior and Senior years do some of the studies become elective.

ENTRANCE REQUIREMENTS.

1. All applicants for admission to the College Department of Loyola University must give satisfactory evidence of good moral character.

2. Candidates who have satisfactorily completed the course prescribed by the Academies of Loyola University will be admitted without examination.

3. Graduates from other Academies or High Schools will be admitted without examination, if they present evidence that they have completed the work equivalent to that required by the course in the Academies of the Loyola University, as set forth in their catalogue.

4. All other applicants for admission, who wish to enter as candidates for the A. B. Degree, will be required to pass a satisfactory examination in the following subjects:

Latin.—Authors: Caesar's Gallic War, four books; Nepos' Lives (6) may be taken in place of two books of Caesar; Cicero's Orations against Catiline and for Archias; Cicero's De Senectute and Sallust's Catiline or Jurgurthine War may be taken as substitutes for three of the above orations; Virgil, four books of the Aeneid, or their equivalent from the Eclogues, Georgics, and Ovid's Metamorphoses.

Grammar and Composition.—The examination in Grammar and Composition will require a thorough knowledge of the whole Latin grammar, together with such facility in writing Latin Prose as is acquired by one who satisfactorily completes the course of exercises prescribed by St. Ignatius Academy. This course is based on Arnold's Latin Composition, for which see catalogue of St. Ignatius Academy.

Greek.—Authors: Xenophon's Anabasis, four books or their equivalent; Homer's Iliad or Odyssey, one book.

Grammar and Composition.—The examination in Grammar will require a thorough knowledge of etymology, of the syntax of cases, the rules of concord and prepositions, the syntax of the verb. The theme will be based on Xenophon, and will test the candidate's ability to translate into Greek simple sentences, with special reference to the use of forms, particularly of the irregular verbs and the common rules of syntax.

English.—Texts Prescribed for Reading and Study: Two plays of Shakespeare, Burke's Conciliation with the Colonies or American Taxation; Irving's Sketch Book; one essay of Macaulay; Scott's Lady of the Lake; Goldsmith's Deserted Village; Tennyson's The Passing of Arthur; Lowell's Vision of Sir Launfal; Coleridge's Ancient Mariner.

The applicant should make himself familiar with the characters, the plot, incidents and characteristic diction of each work. Equivalents will be accepted.

Rhetoric and Composition.—The applicant will be examined on the principles of rhetoric as set forth in Thorndike's Elements of Rhetoric, or in a work of equal standing. The composition will test the candidate's ability to write clear, idiomatic English. The subject will be taken from his experience and observation, or from the books he presents for examination. The spelling and punctuation must be correct, the sentences well constructed. The writer must show some discrimination in the choice of words and ability to construct well ordered paragraphs.

Mathematics.—Algebra to Indeterminate Equations (included). Plane and Solid Geometry, Plane Trigonometry.

History.—Greek and Roman History to the Fifth Century, A. D.; History of the United States; Modern History; Migrations of Nations to Renaissance.

Civics.—Macy's Lessons in Civil Government.

5. Students who have not taken up the study of Latin or Greek in the Academy or High School are admitted to the Collegiate course leading to the Degree of Bachelor of Science. They will be required to present credits in one modern language and the natural sciences equivalent to those granted in Latin or Greek or both.

COLLEGE CLASSES.

Freshman Class.—The object of this class is the cultivation in a special manner of literary taste and style, which is to be effected chiefly by the study of the best poets and prose writers. The Greek and Latin classics are studied for this purpose, together with such English writers as are noted for the highest qualities of literary substance and form. Special emphasis is laid on the study of poetry. Moreover, in this class, as in the others of the course, the literary work is supplemented by that training in Mathematics, Science and History which is required by a liberal education.

Sophomore Class.—The work of this year centers on the study of Oratory and Historical Composition. The nature and types of Oratory, principles of argumentation, the nature and requirements of historical writing, are thoroughly investigated—the best models, ancient and modern, forming the subject-matter of study. Thus, while perfecting literary taste, the class is intended to develop that grasp and perspective of structure without which composition on a large scale is impossible.

Junior Class.—The object of this class is to form the mind to habits of correct reason and to impart sound principles of philosophy. Logic, Rational Philosophy—being, causality, the nature of matter; the human soul, its nature, origin, operation, etc.—are the chief subjects of study. The additional training received from the study of the history of Philosophy and various literary topics is by no means neglected.

Senior Class.—The study of Philosophy is continued this year in courses on the two important subjects of Natural Theology and Ethics. These courses treating of the existence of God, the origin of Moral Obligation, the Natural Law, Duties and Rights, etc., form the crowning work of a liberal education. Their aim is to teach sound principles of conduct, to give the students clear ideas on the purpose and destiny of man, and on the problems of life and their solution, as furnished by ethical principles.

DEPARTMENT OF PHILOSOPHY.

I. LOGIC.

A. Formal Logic or Dialectics.

1. Definition. General idea of reasoning. Logic; natural and scientific.
2. Elements of Logic.
   (*a*) Material Elements. Acts of the mind; ideas, judgments, reasoning; their nature, kinds, properties and external expression.
   (*b*) Formal Element. Inference from a combination of judgments; its requisites, external expression. Principles and laws of reasoning. Forms of Argumentation.
3. Kinds of Reasoning.
   (*a*) Deductive. The Syllogism; demonstrative, probable, sophistic. Fallacies.

(*b*) Inductive. Its nature, requisites, use and abuse.
4. How to build an argument. Invention, definition, division.
5. Method, analytic, synthetic. Science.

B. Material Logic or Criteriology.
1. Truth, its nature, kinds.
2. Logical truth; its attainment; states of the mind with regard to truth.
3. Certitude, its nature, kinds.
4. Skepticism. Kinds: Universal, Methodical Doubt, Agnosticism, Materialism, Positivism, Idealism, Christian Science, Rationalism, Traditionalism.
5. Means of attaining truth. Our cognoscitive faculties; senses, external and internal; intellect. Authority.
6. Criteria of truth; proximate, ultimate.

II. METAPHYSICS.

A. General Metaphysics or Ontology.
1. Being. Objective Concept. Essence.
2. States of Being. Existence. Possibility, internal, external. Source of internal possibility.
3. Transcendental properties of Being: one, true, good.
4. Kinds of Being: Substance and Accident.
(*a*) Notion of Substance.
(*b*) Nature, Individual, Supposite, Person.
5. Notion of accident.
(*a*) Existence of accident separate from substance.
(*b*) Species of accidents.
(*c*) Space, place. Compenetration, Multilocation.
6. Causes of Being.
7. Perfection of Being.
(*a*) Finite, infinite.
(*b*) Contingent, necessary.
(*c*) Time, Eternity.
(*d*) Order, beauty, sublimity.

B. Special Metaphysics.
1. Cosmology.
(*a*) Origin of the World. Materialism. Pantheism. Creation. Age of the World. Atheistic and Theistic Evolution. End of Creation.
(*b*) Constitution of Bodies.
(*c*) Organic bodies. Life. Degrees and Functions. Senses. Experimental psychology.
2. Rational Psychology.
(*a*) Nature of the human soul. Union with body.
(*b*) Properties: Spiritual, immortal.
(*c*) Faculties: 1. Cognoscitive. Intellect. Acts. Origin of Ideas. 2. Appetite. Rational, the Will. Liberty.
3. Natural Theology.
(*a*) God, not Nature, nor Power behind Nature, nor World soul or

spirit, but a Personal Being distinct from the Universe. Pantheism, Atheism, Agnosticism.

(b) His existence known not immediately, nor by intuition, nor by an innate idea, but by a posterior demonstration.

(c) Essence of God. Self-existence. Necessary, Infinite, Eternal, Immutable, Immense.

(d) Attributes: Unity. Simplicity. Polytheism. Dualism. Anthropomorphism. Origin of evil, Physical and Moral.

(e) Knowledge of God.

(f) Will of God.

(g) Influx into creatures. Creation. Conservation. Concourse.

(h) Providence. Distribution of temporal good and evil.

III. ETHICS OR MORAL PHILOSOPHY.

Definition. Truths assumed from Metaphysics.

A. General Ethics.

1. Subjective and Objective ultimate end of Man.
2. Human action. Imputability. Merit. Impediments.
3. Origin of morality of human action in the abstract and in the concrete.
4. Norm of Human Action.
   (a) External Norm. Law, External, Natural, Positive, divine and human Obligation.
   (b) Internal Norm. Conscience.

B. Applied Ethics.

1. Rights and Duties. Relation to others as individuals.
   (a) Duties to God.
   (b) Duties to Self—Suicide. Danger.
   (c) Duties to Fellow-Men. Love. Enemies.
      1. To their Souls:
         (a) To their intellect. Lying. Mental Reservation.
         (b) To their will.
      2. To their body. Self-defense.
      3. To their honor. Dueling.
      4. To their property. Right of private property in abstract. Communism. Socialism. Single Tax. Right to private property in the concrete.
      5. Ways of acquiring property.
   (d) Restitution.
2. Society. Relations to others as members of society.
   (a) Definition of Society.
   (b) Origin of society in the abstract. Man social by nature. Hobbes. Rousseau. In the concrete, some human fact.
   (c) Kinds of society. Primary: the family, state and church. Secondary Societies.
      (a) The family:
         1. Marriage, of divine institution; hence, in its essentials, independent of civil authority.
         2. Properties: Unity and Indissolubility; hence divorce

impossible by human authority.

(*b*) Civil Society.

1. Origin in general from God. Its form determined by some human fact.
2. The family, its unit.
3. Its proximate and ultimate end.
4. Civil authority in the abstract from God; hence the absurdity of the Social Contract of Rousseau; in the concrete, determined by some human fact.
5. Forms of civil society. Stability, Liberty, true and false.
6. Tyranny. Usurpation. Transmission of civil authority.
7. Constitution, natural and written.
8. Minor societies. Right to existence and self-government. Secret societies. Relation to primary societies.
9. Functions of the supreme authority; legislative, judicial, executive; taxation, militia, capital punishment.
10. Social Order:
    (*a*) Material order. Political Economy.
    (*b*) Moral order. Religion. Union of State and Church. Liberty of Conscience. Toleration; dogmatic, personal, civil. Liberty of speech and of the press. Education. Common Schools.
11. Civilization.

(*c*) International Society.

1. International Law. Sources.
2. War.
3. Intervention.

(*d*) Religious Society. The Church.

1. Origin. End.
2. Nature. Rights.
3. Relation to Civil Society.
4. Supreme Authority. Independent of the State. Investure. Secular Arm. Veto of Secular Rulers in the Election of the Pope.

The number of periods indicates the amount of time given to a subject per week. A period, unless otherwise specified, stands for fifty minutes.

LATIN.

FRESHMAN CLASS.

(Five periods of 60 minutes each.)

Precepts: A thorough review of Latin prosody and versification.

Authors—First term: Horace, Ars Poetica; Virgil, Aeneid, books 6 and 12; Livy, books 1 and 21.

Second term: Livy, books 21, 22; Horace, Select Odes.

Sight Reading: Selections from Christian Hymnology; Livy.

Practice—Both terms: Bradley's Aids to Writing Latin Prose, Part I, and selections from Part II to Exercise 60. Two themes a week. A theme in imitation of the prose authors studied about every fortnight.

Memory: From the authors read in class.

SOPHOMORE CLASS.

(Five periods of 60 minutes each.)

Authors—First term: Cicero, Pro Lege Manilla or Pro Milone; Horace, Select Odes and Epodes.

Second term: Horace, Epistles and Satires; Cicero, Pro Ligario; Tacitus, Agricola.

Sight Reading: Selections from the authors assigned above; Tacitus, Germania or Annals; Selections from the Latin Fathers.

Practice—Both Terms: Bradley's Aids, selections from Part II, from Exercise 50 to end of book. Two themes a week. One composition every fortnight in imitation of the authors studied. Off-hand translation from English into Latin.

Memory: Select passages from the authors read.

JUNIOR CLASS.

(Three Hours.)

Authors—First term: Cicero, Quaestiones Tusculanae; Plautus, Duo Captivi; History of Latin Literature, Mackail (Scribner's), for reference. Essays in Latin, Bradley's Aids.

Second term: Cicero, Quaestiones Tusculanae, continued; Pliny, Letters; Juvenal, Selections; Selections from the Latin Fathers. Essays in Latin.

GREEK.

FRESHMAN CLASS.

(Five Periods.)

Precepts—First term: The syntax of the verb repeated; general rules of quantity in connection with the author; the Homeric dialect, cf. Kaegi-Kleist, Nos. 209-215. Brief sketch of Greek Epic and Lyric poetry. Cf. Jebb's Classical Greek Poetry.

Second term: The precepts of the first term thoroughly repeated.

Authors—Both terms: Plato, Apology or Crito; Homer, Odyssey; selections from books 5 to 12. Lyrics selected from the various Greek poets—Sappho, Simonides of Ceos, Pindar (Olympian XII or selections

from a longer ode), Meleager. Cf. Garvy's Anthology.

Sight Reading—Both terms: The New Testament or selections from the authors read in class.

Practice—Both terms: A written theme once a week, based on the authors studied and illustrating the syntax of Attic Greek; or Kaegi-Kleist Exercise Book 2, Nos. 52-66.

Frequent written reviews in class.

SOPHOMORE CLASS.

(Five Periods.)

Authors—First term: Homer, Iliad, select passages; structure of the poem. Demosthenes' Philippics. Analysis of first or third Philippic to be seen in detail.

Second term: Demosthenes on the Crown, with detailed analysis. Sophocles, Antigone, Oedipus Tyrannus or Oedipus Coloneus.

Sight Reading—Both terms: The New Testament or St. Chrysostom, Eutropius, or St. Basil.

Practice—Both terms: Easy themes built on sentences in the text, once a week. Frequent written reviews.

JUNIOR CLASS.

(Three Periods.)

Authors—Both terms: Plato, Phaedo, analysis; Keep's Stories from Herodotus; Aeschylus, Prometheus Bound or Agamemnon.

ENGLISH.

FRESHMAN CLASS.

(Five Periods.)

Precepts: Literary Aesthetics; Theory of the Beautiful, of the Sublime; Taste; Imagination; Theory of Literature; Poetics; Nature and kinds of poetry; elements of poetic substance and form; characteristics of Lyric and Epic Poetry. Fiction: Constructive principles of story-writing; elements of Fiction, viz., plot, character, situation, purpose; Realism and Romanticism in Fiction; development of the English Novel.

Text-book: Coppens' Introduction, with Professor's Notes.

Texts for study: Newman's Lecture on Literature and Essay on Aristotle's Poetics; Selections from Newman, Ruskin, De Quincey, Milton, Coleridge, Wordsworth, Keats, Tennyson, DeVere.

History of English Literature and Criticism. Anglo-Saxon, Semi-Saxon, Old English and Middle English Periods; the Elizabethan Age; The Transition Period; The Classical Age.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week on subjects chiefly literary.

SOPHOMORE CLASS.

(Five Periods.)

Precepts: Oratory: Nature and types of oratory; division of the oration; style in public speaking; methods of oratorical composition; principles of argumentation.

Text-book: Coppens' Art of Oratorical Composition.

History: Principles of historical composition; ethical requirements of history; representative English and American historians.

Texts for study: Burke's speech on American Taxation and Address to the Electors of Bristol; Webster's Reply to Hayne, Girard College Case, Knapp Trial, Commemorative Address on Adams and Jefferson; Newman's Second Spring. Other speeches of Webster, Calhoun and Clay. Famous French Orators.

History of English Literature and Criticism: The Romantic School of the Nineteenth Century; American Literature.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week. Analysis and criticism of speeches.

JUNIOR CLASS.

(Four Periods.)

Precepts: The Drama; laws and technique; theory of the Tragic; of the Comic.

Texts for study: Shakespeare's Plays; interpretation, critical and comparative study.

Practice: One composition a week or every fortnight. Essays, critical and philosophical.

SENIOR CLASS.

(Four Periods.)

Precepts: Theory of expository writing; the critical and philosophical essay; stylistic and structural requirements; historical development of the English essay.

Texts for study: Essays of Macaulay, Newman, Brownson, Archbishop

Spalding, etc. Analysis and comparative study of essays, with the emphasis laid on substance and structural organization.

Practice: One composition a week or every fortnight. Subjects chiefly critical and philosophical.

MATHEMATICS.

FRESHMAN CLASS.

(Three Periods.)

First term: Algebra, c. 22, Choice, etc., to end of book.

Second term: Analytical Geometry, four chapters to Parabola excl., supplementary propositions.

SOPHOMORE CLASS.

(Three Periods.)

First term: Analytical Geometry, Parabola to end of book.
Second term: Calculus.

JUNIOR CLASS.

(Two Periods.)

Both terms: Calculus continued and finished.

Text-books: Wentworth's Complete Algebra and Analytical Geometry; Murray's Calculus.

HISTORY.

FRESHMAN CLASS.

(Three Periods.)

This course deals with the causes which led to the revolutions against religious authority in Germany under Luther and in England under Henry VIII. It treats of the social upheavals and wars which followed from the religious rebellions. It embraces the period from the suppression of the Templars to the reign of Louis XIV.

The Renaissance; the causes of the Protestant Revolution; the Exile of the Papacy; the great Schism of the West; the Hundred Years' War; the Ottoman Empire; the Inquisition, universities, guilds.

The age of Charles V; the Protestant Revolution; Catholic Revival;

wars of the Protestant Revolution; the Huguenots; Thirty Years' War.

Spain and England; Spain in the New World; the Puritans; Age of Louis XIV.

Both terms: Guggenberger, History of the Christian Era, Vol. 2.

SOPHOMORE CLASS.

(Three Periods.)

This course deals with the social and political revolutions of the eighteenth and nineteenth centuries. It gives the long struggle of the people for greater rights and liberties. It begins with the Hanovarian Succession in England and ends with a brief account of contemporary history.

The Hanovarion Succession in England; the beginning of Russia; Wars of the Austrian Succession; Colonies of North America; Seven Years' War; Division of Poland.

Causes of the political and social revolutions of the eighteenth century; American War of Independence; French Revolution; Era of Napoleon; Catholic Emancipation in England.

Europe in the first half of the nineteenth century; Crimean War; Italy; Franco-German War; Civil War in the United States; great powers today; Church and State.

Both terms: Guggenberger, History of the Christian Era, Vol. 3.

JUNIOR AND SENIOR CLASSES.

(One Period.)

Both terms: Turner's History of Philosophy.

History of Philosophy embraces the historical development and scientific correlation of philosophical systems, with such additional information, biographical and otherwise, as may be needful for the fuller understanding of the subject. One lecture is delivered weekly, the students being required to furnish written dissertations upon the matter treated.

Ancient Philosophy. The Vedas. Theories of Egypt and Asia. The Ionic School. The Pythagoreans. The Sophists. The Socratic School. The Epicureans. The Stoics. The Sceptics. The Syncretists and Roman Philosophy. Jewish-Alexandrian Philosophy. Neo-Phythagoreanism. Neo-Platonism. The Fathers of the Church. The Gnostics. The Schoolmen. The Mystics. The Revival of Platonism, of Aristotleianism. Arabian and Jewish Philosophy.

Modern Philosophy. Descartes and his followers: Malebranche, Spinoza, Bayle, Locke, Hume, the Encyclopaedists, Leibnitz, Wolf, Berkley,

Rousseau. The Scottish School. The Transcendentalists, Kant, Fichte, Hegel, Schelling, and their Schools of Thought. Positivism, Modern Evolution Theories. The Neo-Scholastics. Thomistic Philosophy.

ASTRONOMY.

SENIOR CLASS.

(Two Periods.)

Young's Astronomy—historical, descriptive and practical. Lectures and recitations. For reference, Clerk's History of Astronomy, Newcomb's "The Stars," Lockyear, Langley.

GEOLOGY.

General course in structural, dynamic and historical geology. Study of the geology of Illinois. Field work. Petrology and Mineralogy. The college possesses a collection of the more important minerals and rocks; in addition to this, the students have access to the Field museum. Lectures, recitations and written exercises. For reference, Dana and Le Conte.

PHYSIOLOGY.

A course in which the student will be taught the main facts of Physiology, together with a general survey, gross and microscopic, of the mammalian organs and the fundamental mammalian tissues. Lectures, recitations, demonstrations and laboratory work. Specially adapted for those desiring to teach elementary Physiology in academies or high schools.

POLITICAL SCIENCE.

General Principles of Law: Municipal law; civil rights, contracts, real estate, criminal law. International law; its nature and authority; War and Peace, Rights and Duties of Belligerents; Rights and Duties of Neutrals.

General Principles of Government: State Governments. Constitution. Their nature, object, establishment. Departments; legislative, executive, judicial. The National Government: Origin, nature and growth. Its Function; the legislative, the judiciary, the executive.

CHEMISTRY.

Course I. General Inorganic Chemistry.—Prerequisite High School credits in Chemistry from an accredited High School or Academy.

The laboratory work aims at familiarizing the student with thee more common elements and their compounds. Moreover, it supplies the necessary empirical basis for understanding the laws and theories of Chemistry as explained in the lectures. Again, the powers of accurate observation are stimulated, and logical deduction, based on observation, inculcated.

Course II. Qualitative Analysis.—Prerequisite, Course I or its equivalent. This course aims at giving a thorough knowledge of the analytical reactions necessary for recognizing the common metals and acid radicals.

After a review of the theory of dissociation and mass action as fundamental principles of analytical procedure, balancing of equation for oxidation and reduction and methods of analysis are discussed.

Each student is required to systematize the Group manipulation from the manipulations of the individual metals. Refined inorganic tests for metals and acid radicals are included in the course.

A number of the "unknowns" are analyzed and reported on. These returns, together with repititions and written examinations at the end of the semester, are required for full credits.

Text: Otis C. Johnson, Analytical Equation; J. Stieglitz, Qualitative Chemical Analysis, Part III.

Reference: Prescott's Johnson; J. Stieglitz, Qualitative Chemical Analysis, Parts I and II.

PHYSICS.

A continuation of the High School Course involving a more extended development of the principles of Physics, the derivation and interpretation of formulas, and their application to physical problems.

(*a*) *Molecular Physics and Heat.*—A course of advanced laboratory work involving the determination of vapor pressures and densities, coefficients of friction of gases and liquids, molecular electrical conductivities, freezing and boiling points, latent and specfic heat, etc.

(*b*) *Light.*—A course of advanced laboratory work in light, consisting of accurate measurements in diffraction, dispersion, interference and polarization.

(*c*) *The Theory and Use of Alternating Currents.*—A discussion of stationary and moving currents, including transformers, transmission, various types of dynamos and motors, determination of energy factors, construction and use of special alternating current apparatus.

Both Semesters, Lectures and Recitations three periods a week; laboratory, two periods a week.

Prerequisite: Plane Trigonometry, Elementary Algebra, Geometry, High School Physics.

EVIDENCES OF RELIGION.

FRESHMAN CLASS.

(Two Periods.)

The Church as a Means of Salvation; The Last Things: The Christian's Duties Toward God, etc., Wilmer's, pp. 379 to 493, the part from p. 399 to p. 422, excl., being omitted.

SOPHOMORE CLASS.

(Two Periods.)

Grace; The Sacraments, etc., Wilmer's, pp. 279 to 379.

JUNIOR CLASS.

(Two Periods.)

The Creation of the World; the various grades of Creation, etc., Wilmer's, pp. 200 to 279; Christianity a Revealed Religion, etc., pp. 1 to 77.

SENIOR CLASS.

(Two Periods.)

The basis of Morality; Law as the Objective Norm of Human Actions, etc., Wilmer's, pp. 399 to 421; the Constitution of the Church, etc., Wilmer's, pp. 77 to 200.

PEDAGOGY.

As there is a growing tendency on the part of the graduates to enter the teaching profession, a course in pedagogy has been opened, which prepares the graduate to teach in high schools and normal schools, and to be principal of a four years' course high school.

Course 1. The History of Education. Three hours a week, one term. Text-book: Monroe.

A Survey of Greek and Roman Education; Plato's Republic, Aristotle's Politics, and Quintilian's Education of an Orator. Education in the Middle Ages. Drane's Christian Schools and Scholars, and Montalembert's Monks of the West. The Jesuit System of Education. Hughes and Schwickerath. La Salle, Quick, Montaigne, Locke, Rousseau, Froebel, Herbart. Present national school system.

Course 2. Theory and Art of Teaching. Three hours a week, one term. This course consists of lectures, assigned reading, informal discussion and practice. It embraces school equipment, organization and management. The student will be enabled to make a thorough study of the public

and private schools of the city, the high schools and normal schools.

Course 3. Physiological Psychology. Five hours a week, one-half term.

This is a course in applied psychology and is intended to supplement the course of rational psychology.

Definitions, Methods. Organs and their functions. Cell Tissues, Nerves, Spinal Cord, Brain. Mechanical theory of nervous action, Excitation, Inhibition and Conduction.

Correlation of Sensation and Motion. Automatic, reflex and voluntary movements. Cerebral Localization. Speech and theories of the speech center, psychological explanation of its problems.

Stimulus, Genesis of Sensation, Composition of the Sense Percept (idea) —Basis in sensation of the time and space concept. Errors in special perception, in visual perception generally; monocular and binocular vision.

Measurement of sensation intensity. Weber's, Fechner's, Merkel's Law. Time, reactions for sensation, volition, thought. Influence of attention, fatigue, rhythm.

Feeling and Emotion. Apperception, Attention, Association.

References: Wundt, Human and Animal Psychology; Grundzügeder, Physiologischen Psychologie; James, Psychology; Ladd, Outlines of Physiological Psychology; Scripture, the New Psychology; Mayer, Psychology; Tichener, Experimental Psychology; Sandford, Experimental Psychology.

SCHEDULE OF CLASS PERIODS.

	Freshman Year	Sophomore Year	Junior Year	Senior Year
Philosophy			8	5
Latin	5	5	3E	
Greek	5	5	3E	
English	5	5	4	4
History	3	3	1E	1E
Mathematics	3	3	2E	
Chemistry	5			
Physics		5	4E	
Elocution	1	1		
Religion	2	2	2	2
Electives (see below)				

1. Value of Periods: Latin, 60 minutes; Religion, 30 minutes; all other branches, 50 minutes.

2. Electives: In Freshman and Sophomore years a choice must be made between Mathematics or History. Eight hours a week in the Junior and eleven hours a week in the Senior year must be devoted to electives. These include, besides the branches marked with an "E" in the list above, the following: German, French, Political Economy, Pedagogy, Astronomy, Geology, Biology, Chemistry, Public Speaking, Descriptive Geometry, etc.

Conferring of Degrees

HONORIS CAUSA.

LL. D.

Edward Louis Moorhead, A. M., M. D.

Maximillian Herzog, A. M., M. D.

A. M.

Thomas J. Maginnis
L. Frederick Happel
Thomas Q. Beesley
Arthur W. Kettles
Carl Johan, Baron Liljencrants
James H. O'Neill
John W. Thornton
James J. Pickett
Ralph C. Sullivan
Louis C. Rockett
Elmer J. Spiegel

A. B.

Joseph P. Elliott
Mark A. Lies
Richard O'Donnell
Francis E. Streysman
James Fitzgerald
Louis D. Moorhead
Walter E. Somers
Edward V. Walsh
George J. Zahringer

B. S.

Erik Juhl
Richard J. Kelly
Robert S. Westaby
William J. Pollock
Thomas G. Wallin
Daniel J. Paradine
Louis G. Wehrle
John A. Freudenberg

CLASS HONORS.

SENIOR CLASS.

THE ALUMNI MEDAL FOR THE HIGHEST HONORS OF THE CLASS OF 1913 WAS MERITED BY

JAMES FITZGERALD

Next in Merit.....Edward V. Walsh

JUNIOR CLASS.

THE JOHN B. MURPHY MEDAL OF EXCELLENCE WAS MERITED BY

ROBERT J. GARLAND, 91.8

FIRST HONORS.

J. Aaron Colnon, 90.6
William G. Dooley, 90

SECOND HONORS.

John P. Burke, 89.7

SOPHOMORE CLASS.

THE HON. JOHN GIBBONS MEDAL OF EXCELLENCE WAS MERITED BY

EDWARD J. AMBERG, 92

SECOND HONORS.

James J. Noonan, 87.6

FRESHMAN CLASS.

THE HON. RICHARD W. CLIFFORD MEDAL OF EXCELLENCE WAS MERITED BY

ERNEST W. THIELE, 95

FIRST HONORS.

Peter E. Nolan, 93
James P. Molloy, 91
James J. Maher, 91
John F. McNamara, 90
Stanislaus G. Rudziewicz, 90
John G. Peterson, 90

SECOND HONORS.

Leo E. McGivena, 89
Peter P. Vitmanski, 88
Clarence F. Murphy, 88

SPECIAL PRIZES.

THE DAVID R. BREMNER PURSE FOR THE BEST INTER-COLLEGIATE ENGLISH ESSAY WAS WON BY

JAMES FITZGERALD

Next in Merit.....St. Louis University

THE HON. CARTER H. HARRISON ORATORICAL MEDAL WAS WON BY

JAMES FITZGERALD

Next in Merit.....William G. Dooley

THE JOHN NAUGHTEN DEBATE MEDAL WAS WON BY

WILLIAM G. DOOLEY

Next in Merit.....Louis D. Moorhead

Students of College Department

Abel, James A.	Junior
Amberg, Edward J.	Sophomore
Barron, Thomas I.	Freshman
Barron, William L.	Freshman
Burke, John P.	Junior
Caverley, Edward E.	Sophomore
Clennon, Thomas C. A.	Junior
Colnon, John Aaron	Junior
Cunningham, Daniel F.	Freshman
DiGiovanni, Charles	Freshman
Dooley, William G.	Junior
Elliott, Joseph P.	Senior
Fitzgerald, James	Senior
Garland, Robert J.	Junior
Groves, Walter B.	Freshman
Harrington, John	Freshman
Hartnett, Emmet B.	Freshman
Hayes, Lambert K.	Sophomore
Kahle, Ralph C.	Freshman
Kehoe, James E.	Freshman
Kerwin, Joseph	Freshman
Larkin, James J.	Freshman
Lies, Mark A.	Senior
McCauley, Thomas A.	Freshman
McDonough, Charles B.	Freshman
McGivena, Leo	Freshman
McNamara, John	Freshman
Maher, James	Freshman
Mahoney, J. Erwin	Freshman
Molloy, James P.	Freshman
Moorhead, Louis D.	Senior
Murphy, Clarence F.	Freshman

Nolan, Peter E.	Freshman
Noonan, James J.	Sophomore
O'Donnell, Richard	Senior
Peterson, John G.	Freshman
Reynolds, Edward D.	Freshman
Rudziewicz, Stanislaus G.	Freshman
Somers, Walter E.	Senior
Streysman, Francis E.	Senior
Taylor, Morrell L.	Freshman
Thiele, Ernest	Freshman
Thornton, Norbert R.	Sophomore
Vitmanski, Peter P.	Freshman
Walsh, Edward V.	Senior
Warzynski, Francis S.	Sophomore
Zahringer, George J.	Senior

LOYOLA UNIVERSITY

1076 West Twelfth Street

Chicago, Ill.

1260 STUDENTS **127 PROFESSORS**

LAW DEPARTMENT—Has quarters in the Ashland Block. The Dean is William Dillon, LL. D. Candidates for this course apply to A. D. McMahon, A. M., LL. B., Secretary, Ashland Block. Hours of instruction 6:30 to 9:00 evenings.

MEDICAL DEPARTMENT—Bennett Medical College, 1358-1362 Fulton Street. Founded 1868. Every facility in the way of complete equipment and competent faculty. J. D. Robertson, M. D., President; Maximillian Herzog, M. D., Dean.

ENGINEERING DEPARTMENT—Opened September, 1911; high school diploma required for admission. The new engineering building possesses all the best features of the latest engineering schools. Address Hayes Avenue and Sheridan Road.

PHARMACY DEPARTMENT—In point of teaching and equipment has taken its place among the recognized institutions of the country. Address Hayes Avenue and Sheridan Road.

COLLEGE OF ARTS AND SCIENCES—St. Ignatius College, 1076 W. 12th Street. Gives thorough instruction in Philosophy, Higher Mathematics, the Natural Sciences, Ancient and Modern Languages, Literature, History, etc.

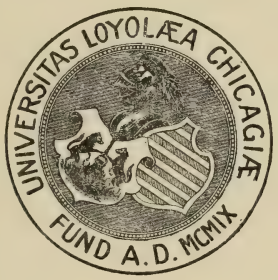
THE HIGH SCHOOLS—St. Ignatius High School, 1076 W. 12th Street, and Loyola Academy, Hayes Avenue and Sheridan Road, admit pupils who have finished eighth grade and take them through the usual high school studies.

LOYOLA
UNIVERSITY
PRESS

(*Founded in 1868*)

BENNETT MEDICAL COLLEGE

OF CHICAGO



MEDICAL DEPARTMENT *of* LOYOLA UNIVERSITY

FORTY-SIXTH
ANNUAL ANNOUNCEMENT
1913-1914

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FORTY-SIXTH
ANNUAL ANNOUNCEMENT

of the

Bennett Medical College
OF CHICAGO

MEDICAL DEPARTMENT
of
LOYOLA UNIVERSITY

Telephone Haymarket 856
Address all Communications: Bennett Medical College
1358-1362 Fulton Street, Chicago, Ill.

COLLEGE CALENDAR 1913--1914

1913

Monday, September 1st.....Labor Day; Holiday.
Monday, September 15th...Entrance and Conditional Examinations Begin.
Monday, September 22d....Reception and Introductory Addresses, 8 p. m., at College Amphitheatre.
Tuesday, September 23d....Regular Session Begins.
Thursday, November 13th..Special Alumni Day.
Thursday, November 27th..Thanksgiving Day; Holiday.
Saturday, Dec. 20th, 1 p. m..Christmas Vacation Begins.

1914

Monday, January 5th.....College Work Resumed, 8 a. m.
Monday, January 12th.....Examinations Commence.
Monday, January 26th..... Second Term Begins.
Friday, Saturday.....Easter Holiday.
Thursday, May 14th.....Alumni and Seniors' Banquet.
Sunday, May 10th.....Baccalaureate Address.
Friday, May 29th..... Second Term Ends.
Saturday, May 30th.....Memorial Day; Holiday.
Monday, June 8th..... Summer Term Begins.
Friday, June 19th.....Alumni Reunion, 10 a. m., College Amphitheatre.
Friday, June 19th.....Annual Commencement, 8 p. m
Saturday, July 4th.....Independence Day; Holiday.
Saturday, September 26th.. Third Term Ends.

THE COUNCIL.

The executive body of the Faculty is the Council. The duties of the Council are to maintain discipline, recommend to the Trustees the appointment of members of the Faculty, superintend the curriculum, and otherwise act as an executive committee.

Maximilian Joseph Herzog, M. D., LL. D., Dean.
Henry Stanislaus Spalding, S. J.
Edgar Mead Reading, A. M., M. D.
Nathaniel Abraham Graves, A. B., M. D.
John Dill Robertson, B. S., M. D.
Henry Foster Lewis, A. B., M. D.
Jacob Franklin Burkholder, M. D.
Arthur Bennett Rankin, B. A., M. B.
William Alexander Newman Dorland, M. A., M. D.
Oscar Brunk Funkhouser, M. D.
Otto Charles Huber, B. S., M. D.
Aime Paul Heineck, M. D.
Frank Marion Horstman, Ph. G., M. D.
Felipp Kreissl, M. D.
David Lieberthal, M. D.
Ulysses Joshua Grim, M. D.
Charles Henderson Miller, M. D.
John Vosburgh Stevens, M. D., Secretary, (*ex officio*).

ADMINISTRATIVE OFFICERS.

Maximilian Joseph Herzog, M. D., LL. D., Dean.
John Dill Robertson, M. D., President.
Owen Thomas Owen, A. B., Registrar.
Arthur B. Rankin, B. A., M. B., Junior Dean.
James Alexander Waugh, Bursar and Curator.

The Registrar is authorized to conduct correspondence with students; and through him will be obtained from the Dean of the College information concerning credits for preliminary education and for work done in other institutions.

The College office is open daily and by appointment either the Registrar or representatives may be seen in the evening. Address all correspondence to Business Manager, Bennett Medical College. Telephone: Haymarket 856.

The receipts for money must be signed by the Bursar, Mr. James A. Waugh.

LOCATION.

The college is located at the corner of Ada and Fulton streets and can be easily reached by several car lines. Take the Madison, Randolph, or Fulton street cars to Ada street, thence north to the college, or take the Lake Street Elevated to Sheldon Street Station, which is within two blocks of the College.

The Faculty of Bennett Medical College

Representing Loyola University

JOHN LOUIS MATHERY, S. J., PRESIDENT.

HENRY S. SPALDING, S. J., REGENT,

DIRECTOR OF AFFILIATED WORK OF THE UNIVERSITY.

MAXIMILIAN JOSEPH HERZOG, M. D., LL. D., Dean....59 E. Madison St.
Professor of Pathology, Bacteriology and Hygiene.

EDGAR MEAD READING, A. M., M. D.....6338 Monroe Ave.
Professor of Neurology.

NATHANIEL ABRAHAM GRAVES, A. B., M. D.....2258 Cornelia St.
Professor of Medicine.

JOHN DILL ROBERTSON, B. S., M. D.....32 N. State St.
Professor of Surgery and Clinical Surgery.

HENRY FOSTER LEWIS, A. B., M. D.....29 E. Madison St.
Professor of Gynecology.

JACOB FRANKLIN BURKHOLDER, M. D.....108 N. State St.
Professor of Ophthalmology.

NOBLE MURRAY EBERHARDT, A. M., M. S., M. D.....7 W. Madison St.
Professor of Physiological Therapeutics.

ARTHUR BENNETT RANKIN, B. A., M. B.....1360 Fulton St.
Professor of Anatomy.

OTTO CHARLES HUBER, B. S., M. D.....7217 W. Madison St.
Professor of Chemistry.

WILLIAM ALEXANDER NEWMAN DORLAND, M. A., M. D.....
.....808 Chicago Savings Bank Bldg.
Professor of Obstetrics.

DAVID LIEBERTHAL, A. M., M. D.....31 N. State St.
Professor of Dermatology.

FELIPP KREISSL, M. D.....5 N. Wabash Ave.
Professor of Genito-Urinary Diseases.

ULYSSES JOSHUA GRIM, M. D.....31 N. State St.
Professor of Otology and Rhino-Laryngology.

FRANK MARION HORSTMAN, Ph. G., M. D....725 S. Central Park Ave.
Professor of Physiology.

CHARLES HENDERSON MILLER, M. D.....805 E. 63rd St.
Professor of Pharmacology and Therapeutics.

WILLIAM JOHN POLLOCK, B. S., M. D.....2100 W. Chicago Ave.
Professor of Medicine.

WILLIAM FRANCIS WAUGH, A. M., M. D.....1360 Fulton St.
Dean Emeritus and Professor of Tropical Medicine.

CHARLES J. WHALEN , M. D.....15 E. Washington St.
Professor of Medicine.

SETH SCOTT BISHOP, B. S., M. D., LL. D.....31 N. State St.
Professor of Otology and Rhino-Laryngology.

JOHN VOSBURGH STEVENS, M. D.....100 Loomis St.
Professor of Pediatrics.

WILLIAM RITTENHOUSE, A. M., M. D.....31 N. State St.
Professor of Obstetrics.

EUGENE SOLOMON TALBOT, M. S., D. D. S., M. D., LL. D.....
.....122 S. Michigan Ave.
Professor of Stomatology and Dental Surgery.

STUART JOHNSTONE, M. D.....159 N. State St.
Professor of Gynecology.

WILLIAM BERINGER MARCUSSON, A. M., M. D.....1551 W. Madison St.
Professor of Surgery.

BENJAMIN HARRISON BREAKSTONE, B. S., M. D.....32 N. State St.
Professor of Surgery.

ANTON THEODORE HARRIS HOLMBOE, M. D.....1045 N. Sacramento Ave.
Professor of Orthopedic Surgery.

FRANK BYRNES, M. D.....29 E. Madison St.
Professor of Surgery.

HENRY GEORGE WILLIAM REINHARDT, M. D.....2656 Logan Boul.
Professor of Forensic Medicine.

AIME PAUL HEINECK, M. D.....32 N. State St.
Professor of Clinical Surgery.

HUGH NEIL MACKECHNIE, A. B., M. D., C. M., F. T. M. C.....
.....7 W. Madison St.
Professor of Surgery.

CHARLES ALBERT WADE, M. D.....3218 W. Jackson Boul.
Professor of Pediatrics.

GORDON GRANGER BURDICK, M. D.....7 W. Madison St.
Professor of Physiological Therapeutics.

THEODORE CHARLES FREDERICK ABEL, M. D.....7 W. Madison St.
Professor of Clinical Diagnosis.

HARRY LYNCH O'CONNOR, B. S., M. D.....10 S. Ashland Boul.
Professor of Surgical Pathology.

OSCAR BRUNK FUNKHOUSER, M. D.....619 S. 40th Ave.
Professor of Medical Diagnosis.

THOMAS HOGAN, LL. B.....815 Ashland Block
Professor of Medical Jurisprudence.

KAZIMIR AMBROSE ZURAWSKI, B. A., M. D.....32 N. State St.
Professor of Dermatology.

ARTHUR GAMMAGE, LL. B.....835 Ashland Block
Professor of Medical Jurisprudence.

ALFRED DE ROULET, M. S., M. D.....15 E. Washington St.
Clinical Professor of Gynecology and Curator of the Museum.

JAMES JOSEPH MCGUINN, M. D.....7 W. Madison St.
Clinical Professor of Surgery.

ROLAND HODGES PHILLIPS, Ph. G., B. S., M. D.....1526 W. Madison St.
Clinical Professor of Medicine.

CAMILLO VOLINI, M. D.....2929 Washington Boul.
Clinical Professor of Surgery.

CARL WAGNER, M. D.....160 Eugenia St.
Clinical Professor of Ophthalmology.
JEREMIAH HENRY WALSH, M. D.....3202 Washington Boul.
Associate Professor of Surgery.
ELZEAR LA MOTHE, A. B., M. D.....17 W. Madison St.
Associate Professor of Ophthalmology.
DOUGLAS AMOS PAYNE, M. D.....108 N. State St.
Associate Professor of Ophthalmology.
ARTHUR EDISON GAMMAGE, M. D.....6405 N. Clark St.
Junior Professor of Clinical Surgery.
THOMAS DOWNES LAFTRY, M. D.....16 N. Kedzie Ave.
Junior Professor of Surgery.
RICHARD JAY LAMBERT, Ph. G., M. D.....St. Charles, Ill.
Junior Professor of Therapeutics.
JOHN HAROLD EDGECOMB, M. D.....3158 Jackson Boul.
Junior Professor of Surgery.
ARTHUR LEDERER, M. D.....1604 Mallers Bldg.
Associate Professor of Hygiene and Sanitary Science.
ELMER HOLMES FLINN, M. D.....3168 Ogden Ave.
Junior Professor of Materia Medica.
THOMAS HENRY KELLEY, M. D.....1001 E. 75th St.
Junior Professor of Surgery.
LESLIE FRANCIS MACDIARMID, M. D.....7 W. Madison St.
Junior Professor of Medicine.
JOHN FRANCIS TYRELL, A. B., LL. B.....39 N. Clark St.
Junior Professor of Medical Jurisprudence.
ARTHUR EDWARD LEHNER, M. D.....3001 N. Central Park Ave.
Junior Professor of Clinical Medicine.
WILLIAM OSCAR SWEEK, M. D.....1358 Fulton St.
Assistant Professor of Bacteriology and Clinical Pathology.
WILLIAM BERNARD MCCAULEY, M. D.....7043 N. Clark St.
Junior Professor of Surgery.
CHARLES WILLIAM CLARK, M. D.....301 E. 61st St.
Junior Professor of Surgery.
ALBERT HOWARD CARTER, M. D.....1551 W. Madison St.
Instructor of Surgery.
JOHN JOSEPH MEANY, M. D.....3736 W. Chicago Ave.
Clinical Instructor of Surgery.
ANDREW COSMAS GARVY, A. B., M. D.....1104 Wilson Ave.
Instructor of Surgery.
ARTHUR HENRY WEIS, M. D.....2783 Lincoln Ave.
Instructor of Medicine.
LEO STEINER, M. D.....1822 S. Halsted St.
Instructor of Materia Medica.
THOMAS ALBERT CARTER, B. S., M. D.....919 Wellington St.
Clinical Assistant in Gynecology.
WILLIAM ALLEN PORTER, M. D.....7 W. Madison St.
Instructor of Laryngology.
FRANCES HELEN COOK, M. D.....7631 S. Sangamon St.
Instructor of Gynecology.

JAMES HENRY MORAN, M. D.....567 E. 71st St.
Instructor of Medicine.

ARTHUR CALDWELL GILLAM, A. M., M. D.....1612 Milwaukee Ave.
Instructor of Gynecology.

BENJAMIN EDELSTEIN ELLIOT, B. S., M. D.....4617 Calumet Ave.
Demonstrator of Anatomy.

REID OWEN HOUSER, M. D.....5681 W. Madison St.
Demonstrator of Anatomy.

EVA HANSEN, M. D.....1360 Fulton St.
Instructor of Ophthalmology.

DAVID O'SHEA, M. D.....1803 S. Ashland Ave.
Clinical Assistant in Gynecology.

WALTER FRANZ VON ZELINSKI, B. S., M. D.....4709 N. Rockwell St.
Assistant in Anatomy.

JACK MOSES, M. D.....603 S. Halsted St.
Clinical Assistant of Medicine.

HENRY RANDAL KENNY, A. B., M. B., B. Ch., B. A. O..3725 Fullerton Ave.
Assistant in Anatomy and Gynecology.

CLEVELAND CHARLES MCLANE, M. D. C.....1360 Fulton St.
Assistant in Pathology.

DANIEL JAMES PARADINE, B. S., M. D.....1360 Fulton St.
Assistant in Anatomy.

CLEVELAND SHAMBAUGH, M. D.....6903 S. Halsted St.
Assistant in Medicine.

ALBERT CARL APKING, M. D.....1360 Fulton St.
Assistant in Medicine.

MARY MULCAHY, M. D.....1360 Fulton St.
Assistant in Pathology and Obstetrics.

HALDER CARLSEN, M. D.....1360 Fulton St.
Assistant in Pathology.

D. M. DAVIDSON, M. D.....1360 Fulton St.
Assistant in Physiology.

THOMAS GAIL WALLIN, M. D.....1360 Fulton St.
Assistant in Obstetrics.

HERMAN BOHL, M. D.....1360 Fulton St.
Assistant in Medicine.

WILLIAM HENRY GEHL, M. D.....1360 Fulton St.
Assistant in Anatomy and Medicine.

HISTORY.

Bennett Medical College was chartered by an act of the General Assembly of Illinois in 1868. Over two thousand students have been graduated since that time. The aim of this College has always been to furnish instruction of a practical character, so as to send out well qualified practitioners of medicine rather than scientific doctors. At the same time the necessity of a sound scientific foundation is appreciated.

The College came under its present management in 1908 and has since then shown phenomenal growth. The Illinois Medical College and the Reliance Medical College were absorbed by Bennett in 1910, so that three colleges were united to increase the strength of the one.

In 1910 affiliation with Loyola University was consummated. Thus the influence of a great University added greatly to the support and standing of Bennett Medical College.

Our students have the advantage of the expert pedagogical advice, as well as the material advantage of the library, gymnasium, athletic fields, and other departments of Loyola University.

GOVERNMENT.

The financial government of the college is vested in a Board of Trustees.

The educational work of the college is under the direct supervision of the Loyola University, who, with the Council and faculty of the medical college prepare and enforce the curriculum outlined in this announcement.

GENERAL STATEMENT.

The forty-sixth annual Course of Study in Bennett Medical College will begin September 23, 1913, and will continue eight months, closing May 29, 1914. The regular college year is divided into two terms, the first ending January 25, 1914. The second term begins January 26, 1914, and ends May 26, 1914. Commencement exercises will occur in common with the other Departments of Loyola University.

The course of instruction leading to the degree of Doctor of Medicine is carefully graded and covers a period of four

years of eight months each, consisting of lectures, recitations, conferences and laboratory work, with attendance upon dispensary and hospital clinics. Great care has been exercised in arranging the curriculum for the entire course so that the student may not only be thoroughly qualified in theoretical matters, but that he shall receive the utmost amount of practical training. Each student is given personal attention, will make personal examinations of cases and do personal work in the laboratories, clinics and at the bedside.

The college is located in a district where there is an abundance of clinical material. Cook County Hospital, which averages 1,000 bed patients daily, is but ten minutes' walk from the College while the Jefferson Park Hospital is only a few blocks distant. Students are required to attend clinical instruction in these institutions daily in addition to the clinical work done in the college building. Members of our faculty are on the attending staffs of the Chicago Union, Lake View, Cook County, Deaconess, Jefferson Park, Columbus, St. Joseph's, St. Anthony's, St. Bernard's, St. Elizabeth's, Maimonides, Rhodes Avenue, Lakeside, and other hospitals. Students of the College will attend in small sections clinics at these various hospitals.

The College Buildings.

The buildings occupied by the Bennett Medical College were built for medical purposes. They are located in a part of the city easily accessible and within a few blocks of Chicago's great medical center. The rooms are well ventilated, heated, and lighted. There are two amphitheaters, four commodious lecture halls and many clinic rooms. The laboratories occupy two entire floors. There are also library and reading rooms, drug room, also receiving and retiring rooms.

In 1910 an addition to the college proper was erected, making commodious quarters, and for the most part used for additional Laboratories, and devoted to the Study of Physiology, Anatomy, Chemistry, Pathology, Bacteriology, Histology and Pharmacology.

One large floor is devoted exclusively to the study of modern medical and theoretical chemistry. This science is a very important factor to the medical student and ranks in importance with anatomy and pathology. The chemical laboratories are fitted up with modern work desks and tables, with running water, gas, fume-chambers and all the necessary ap-

pliances for teaching inorganic chemistry, qualitative and quantitative analysis, volumetric analysis, as well as the most advanced organic and physiological chemistry; modern medicine demands a very exhaustive study of this science, and the college is prepared to meet that demand.

The laboratories devoted to histology, embryology, pathology, bacteriology, and neurological anatomy occupy another floor, where all the necessary apparatus is installed for teaching these sciences in the most approved manner.

The top floor of the new annex is devoted to the study of anatomy. As all who are versed in the subject of the history of medicine know, an intimate first-hand knowledge of the structure of the human body is essential for the successful practice of any branch of medicine or surgery, and one of the most hopeful signs for the success of the great movement that is at the present time taking place in medical educational methods is the prominent place that all medical educators are giving to the subject of anatomy. The entire top floor is equipped for the proper study of this science. The rooms are light and airy and are arranged according to the most approved sanitary ideas.

Each floor is provided with lecture rooms for classes, private rooms for professors, and for students who wish to devote time to some piece of research work.

By utilizing her unexcelled clinical advantages Chicago offers exceptional opportunity to summer students. The summer is the season of the greatest mortality, and there are important groups of diseases to be seen in that portion of the year only. Hence the value of practical work in diseases peculiar to the season.

Library.

The Library is situated on the first floor, easy of access to the entire student body. It has been acquired by purchase, and by donations from Students, Alumni and members of the Faculty. It contains a large number of reference books, dictionaries and current medical Journals. An attendant is constantly present to aid the student.

In addition to this library, our students have access to the large general libraries of Loyola University, 47,000 volumes. In Chicago, students have access to the Chicago Public Library, 352,093 volumes; the John Crerar Library, 228,000 volumes; the Newberry Library, 179,967 volumes; and the Library of the Chicago Historical Society, 50,000 volumes.

Hospitals.

The College Hospital, known as the Jefferson Park Hospital, is a part of Bennett Medical College and is located at 1402 West Monroe street. The college by contract of affiliation has full control of the Hospital.

It has an amphitheater capable of seating eighty students, so arranged that each student has a plain view of the pit.

During the summer of 1913, an additional wing was built, making total accommodations for 100 patients. The new Hospital embodies the latest and best ideas in Hospital construction and equipment.

The junior and senior students are required to attend clinics in this hospital daily. The students from the senior class do externe work in this hospital, two serving at one time. During this time they write histories of the patients, do the hospital laboratory work, give anesthetics under the supervision of the interne, and assist in all operations.

In addition to above is the Cook County Hospital, giving unsurpassed advantages for clinical instruction. Eighteen other hospitals in Chicago are open to students of Bennett Medical College. The Dispensary and Clinic rooms are ten in number, conveniently situated in the college buildings, where over 6,000 patients are treated each year.

Directions to Students.

A Student after arrival in Chicago, should come direct to College, corner Ada and Fulton Streets, or call up the College Office by telephone, Haymarket 856. A representative will meet him and arrange for his room, and delivery of baggage. Special care is taken to select private boarding houses, where students may have the comforts of home and a quiet room in which to pursue their studies. Board and room can be had at $4.00 to $6.00 per week. Students often procure a room and board themselves, thereby reducing the expense to below $3.00 per week.

Young men who find it necessary to meet their own expenses while attending school will be assisted in finding suitable employment outside of school hours. Our School Employment Department renders valuable service and is in touch with stores, shops, homes, Express Companies, janitor's services, Surface and Elevated Railway Companies, etc.

College Fees.

Standing and Certificates.

At the end of each session a certificate of his standing for the year is sent by mail to each student. No marks will be sent or credit given to any student who is in arrears with the College.

Fees and Expenses.

A Matriculation fee of five dollars is payable once only.

A charge of one hundred and twenty-five dollars for tuition is payable in advance for a College year of eight months.

If desired, the tuition may be paid in installments, in which case no additional charge is made, and the fees are then paid as follows:—

First payment:—Five dollars for matriculation fee and sixty-two dollars and fifty cents on account of the tuition, a total of sixty-seven dollars and fifty cents, payable at the beginning of the first term.

Second payment:—Sixty-two dollars and fifty cents the balance of the tuition, payable at the beginning of the second term.

A fee of five dollars is charged for the materials used in each laboratory course.

A fee of fifteen dollars is charged to seniors for the course in Practical Obstetrics.

There is a graduation fee of twenty-five dollars.

Students leaving the school have no claim for tuition paid.

Post-Graduate Fees.

Post-graduate fee for graduates of other schools	$125.00
Single course	50.00
Post-graduate fee for graduates of this school	50.00
Single course	30.00

A deposit of five dollars must be made on entrance to cover cost of breakage and damage of building or equipment. The unexpended balance returnable at the end of the college year. Fee for use of locker one dollar.

REQUIREMENTS FOR ADMISSION.

A medical education must be based upon a thorough preliminary training and every student preparing to take a medical course should have as a minimum amount of preparation a high school course of four years of nine months each. Those who do not possess a diploma or certificate showing the required preliminary education may take an examination conducted by the state superintendent of public instruction or like state officer. The entrance examination will be in conformity with the requirements of the State Board of Health, which include an examination in all the several branches embraced in the curriculum of a four year high school course.

The university offers in its academy excellent facilities for premedical education.

Beginning January 1st, 1914, Bennett College will require besides a four year high school course, one year of chemistry, physics, biology, and French or German, before admission to the Freshmen class. For details of this year students are advised to correspond with the Dean.

An applicant for admission to Bennett Medical College must fulfill the following conditions:

First: A creditable certificate of moral character, signed by two physicians of good standing in the state from which he comes.

Second: He must deposit with the college the sum of $5.00 for matriculation and present a diploma of graduation from a literary or scientific college or high school or pass a satisfactory examination in conformity with the requirements of the State Board of Health.

ADMISSION TO ADVANCED STANDING.

Students from fully recognized colleges will be given credit for the time spent in these colleges upon presentation of credits for work done and a certificate of attendance. This College reserves the right to require examination of such applicants. Graduates from approved colleges of medicine will be admitted to the senior year without examination.

REQUIREMENTS FOR GRADUATION.

1. Attainment of 21 years of age.
2. Credible certificate of good moral character.

3. Satisfactory behavior while in college.

4. Attendance on four courses of medical instruction of at least eight months each in separate calendar years.

5. Regular attendance during the course on all prescribed exercises.

6. Satisfactory examination in all branches.

7. Attendance on two courses of lectures in anatomy and dissection of a lateral half of the human body.

8. Graduation fee of twenty-five dollars.

GENERAL PLAN OF THE CURRICULUM AND SCHEDULE IN HOURS.

The regular course of study in the Bennett Medical College, leading up to the degree of Doctor of Medicine, comprises a four years' course of eight months each.

The arrangement of the subjects and the hours devoted to each is as follows, but the faculty reserves the right to make such changes in the schedule as it may deem advisable:

FRESHMAN YEAR.

Subjects	Recitations	Laboratory	Total
Chemistry	90	120	210
Physiology	30	30	60
Anatomy	180	480	660
Materia Medica	60	...	60
Biology	30	30	60
Histology and Embryology	60	180	240
	450	840	1290

SOPHOMORE YEAR.

Subjects	Recitations	Laboratory	Total
Physiological Chemistry	45	15	60
Chemistry	30	60	90
Nervous Anatomy	30	60	90
Anatomy	60	300	360
Physiology	60	60	120
Pathology	90	180	270
Bacteriology	45	90	135
Therapeutics	30	30	60
Surgery	30	...	30
	420	795	1215

JUNIOR YEAR.

Subjects	Recitations	Laboratory and Clinics	Total
Medicine	60	180	240
Surgery	90	150	240
Obstetrics	90	...	90
Gynecology	60	30	90
Pediatrics	30	30	60
Physiological Therapeutics	30	...	30
Dermatology	30	30	60
Otology and Laryngology	30	30	60
Therapeutics	60	60	120
Ophthalmology	30	30	60
Clinical Diagnosis	15	45	60
Surgical Pathology	30	60	90
Operative Surgery	...	12	12
	555	657	1212

SENIOR YEAR.

Subjects	Recitations	Laboratory and Clinics	Total
Medicine	120	150	270
Surgery	90	240	330
Obstetrics	120	60	180
Gynecology	60	60	120
Ophthalmology	15	15	30
Genito-Urinary	30	30	60
Otology and Laryngology	...	90	90
Neurology	30	30	60
Dermatology	30	30	60
Forensic Medicine	30	...	30
	525	705	1230

At the end of each term the standing of a student in each of his courses will be reported by the instructor to the Secretary and is entered on record. Records are not given to the students who are in arrears in their tuition fees.

Work reported as of Grade D must either be made good at the next following opportunity for re-examination, or must be taken again in the class room if credit is to be obtained. Work reported as of grade E, or in which two D's have been reported must be made up in class.

Students' reports will bear the following grades: A—excellent; B—good; C—passable; D—repeat examination only; E—repeat entire course class work and examinations.

All scheduled courses prescribed in this catalogue as necessary for the degree of Doctor of Medicine must be passed before graduation, or the student may repeat the study during another term and be examined with the next class. Students who have failed in the equivalent of thirty-five per cent of the work of the term must repeat the work of the term.

HOSPITAL POSITIONS.

House physicians are appointed from each graduating class to serve as internes, thus giving those who desire to avail themselves of this opportunity a most thorough and practical finish. Fifty internes are chosen by competitive examination to serve eighteen months in Cook County Hospital.

Bennett students are eligible to compete for these, as well as positions as internes in thirty other hospitals in Chicago and vicinity. This year every graduate who so desired was furnished with a hospital interneship.

Internes are given their board, room and laundry for their service in the hospitals. These appointments are of great value, and are much desired and sought after by the young medical graduate of today.

POST-GRADUATE COURSE.

The advantages offered practitioners by this college for a post-graduate course are excellent. The studies in the senior year work are practical in every particular. They are supplemented by a variety of daily clinics in which there is opportunity for practitioners to become familiar with the latest methods, both in diagnosis and treatment. Facilities will be furnished those who desire to pursue any particular line of work. Special advantages are extended to those who desire temporary appointments as clinical assistants.

Practitioners can enter at any time and can take the work in any department of the regular course of study at moderate cost. Any practitioner of medicine in good standing may take this course.

Graduates of approved medical colleges may, by attending one full college year and fulfilling the requirements, receive the regular diploma from Bennett Medical College. This plan of post-gradute work is recommended, as it offers to the practitioner the advantages of a recent college course.

It gives a practical finish to his education which cannot be obtained in any other way.

FRESHMAN SCHEDULE — First Term (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9 to 10	Sec. 2 Anatomy Rankin Sec. 1 Dissection	Sec. 1 Anatomy Rankin Sec. 2 Dissection	Osteology Rankin	Sec. 2 Anatomy Rankin Sec. 1 Dissection	Osteology Rankin	Sec. 1 Chem. Lab. Huber Sec. 2 Dissection
10 to 12	Sec. 1 and 2 Dissection	Sec. 1 Chem. Lab. Huber Sec. 2 Dissection	Sec. 1 Dissection Sec. 2 Osteology Lab.	Sec. 1 Dissection Sec. 2 Chem. Lab. Huber	Sec. 1 Osteology Lab. Sec. 2 Dissection	Sec. 1 Anatomy Rankin Sec. 2 Dissection
12 to 1	Noon Recess					Biology Horstman
1 to 2	Chemistry Huber	Terminology Dorland	Anatomy Rankin	Chemistry Huber	Chemistry Huber	
2 to 3	Sec. 1 and 2 Dissection Elliott Howser	Sec. 1 and 2 Dissection Elliott Kenny	Sec. 1 Dissection Paradine Sec. 2 Chem. Lab. Huber	Anatomy Quiz	Anatomy Quiz	
3 to 4				Sec. 1 Biology Lab. Horstman Sec. 2 Dissection Gehl	Sec. 1 Dissection Kenny Sec. 2 Biology Lab. Horstman	
4 to 5	Sec. 1 Dissection Gehl Sec. 2 Biology Quiz	Sec. 1 Biology Quiz Sec. 2 Dissection Kenny	Biology Horstman			

Second Term—Histology, Embryology, Materia Medica and Physiology replace Osteology and Biology.

SOPHOMORE SCHEDULE — First Term (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8 to 10	Sec. 1 Pathology Lab. Herzog Sec. 2 Org. Chem. Lab. Huber	Sec. 2 Pathology Lab. Herzog Sec. 1 Org. Chem. Lab. Huber	Sec. 1 Pathology Lab. Herzog Sec. 2 Org. Chem. Lab. Huber	Sec. 2 Pathology Lab. Herzog Sec. 1 Org. Chem. Lab. Huber	Sec. 1 Pathology Lab. Herzog Sec. 2 Dissection Rankin	Sec. 2 Pathology Lab. Herzog Sec. 1 Physiology Lab. Horstman
10 to 11	Pathology Herzog	Bacteriology Herzog	Pathology Herzog	Bacteriology Herzog	Pathology Herzog	Sec. 1 Dissection Rankin
11 to 12	Org. Chem. Huber	Mat. Medica Miller	Org. Chem. Huber	Mat. Medica Miller	Org. Chem. Huber	Sec. 2 Physiology Lab. Horstman
			NOON RECESS			
1 to 2	Sec. 1 Anatomy Rankin Sec. 2 Dissection Elliott	Sec. 2 Anatomy Rankin Sec. 1 Dissection Elliott	Sec. 1 Dissection Rankin	Sec. 1 Anatomy Rankin Sec. 2 Dissection Elliott	Sec. 2 Anatomy Rankin Sec. 1 Dissection Elliott	Physiology Horstman
2 to 3	Sec. 1 Anatomy Quiz Sec. 2 Dissection Howser	Sec. 2 Anatomy Quiz Sec. 1 Dissection Kenny	Sec. 2 Pharmacology Lab. Miller	Sec. 1 Anatomy Quiz Sec. 2 Dissection Howser	Sec. 2 Anatomy Quiz Sec. 1 Dissection Kenny	Minor Surgery Robertson
3 to 4	Sec. 1 Physiology Lab. Horstman	Sec. 1 Bacteriology Lab. Herzog	Physiology Horstman	Sec. 1 Dissection Gehl	Sec. 1 Bacteriology Lab. Herzog	
4 to 5	Sec. 2 Bacteriol. Lab. Sweek	Sec. 2 Physiology Lab. Horstman	Bacteriol. Quiz. Maclane	Sec. 2 Bacteriol. Lab. Sweek	Sec. 2 Dissection Gehl	

SOPHOMORE SCHEDULE — SECOND TERM (Provisional)

HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8 to 10	SEC. 1 Neurology Lab. Rankin SEC. 2 Physiol. Chem. Lab. Huber	SEC. 2 Pathology Lab. Herzog SEC. 1 Physiol. Chem. Lab. Huber	SEC. 1 Pathology Lab. Herzog SEC. 2 Physiol. Chem. Lab. Huber	SEC. 2 Neurology Lab. Rankin SEC. 1 Physiol. Chem. Lab. Huber	SEC. 1 Pathology Lab. Herzog SEC. 2 Dissection Von Zelinski	SEC. 2 Pathology Lab. Herzog SEC. 1 Physiology Lab. Hortsman
10 to 11	Neurology Rankin	Pathology Herzog	Neurology Rankin	Pathology Herzog	Pathology Herzog	SEC. 1 Dissection Rankin
11 to 12	Physiol. Chem. Huber	Mat. Medica Miller	Physiol. Chem. Huber	Mat. Medica Miller	Physiol. Chem. Huber	SEC. 2 Physiology Lab. Hortsman
1 to 2	SEC. 1 Anatomy Rankin SEC. 2 Dissection Elliott	SEC. 2 Anatomy Rankin SEC. 1 Dissection Elliott	SEC. 1 Dissection Paradine	SEC. 1 Anatomy Rankin SEC. 2 Dissection Elliott	SEC. 2 Anatomy Rankin SEC. 1 Dissection Elliott	Physiology Hortsman
2 to 3	SEC. 1 Anatomy Quiz SEC. 2 Dissection Elliott	SEC. 2 Anatomy Quiz SEC. 1 Dissection Elliott	SEC. 2 Pharmacology Lab. Miller	SEC. 1 Anatomy Quiz SEC. 2 Dissection Elliott	SEC. 2 Anatomy Quiz SEC. 1 Dissection Elliott	Minor Surgery Robertson
3 to 4	SEC. 1 Dissection Gehl	SEC. 1 Physiology Lab. Hortsman	Physiology Horstman	SEC. 1 Dissection Gehl	SEC. 1 Physiology Quiz	
4 to 5	SEC. 2 Physiology Lab. Horstman	SEC. 2 Dissection Kenny	Embryology	SEC. 2 Physiology Quiz	SEC. 2 Dissection Kenny	

JUNIOR SCHEDULE (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9 to 10	Medical Diagnosis Funkhouser	Dermatology Zurawski	Nose and Throat Grim	Medical Diagnosis Funkhouser	Obstetrics Rittenhouse	Surgical Pathology O'Connor
10 to 11	Medicine MacDiarmid	Obstetrics Rittenhouse	Neurology Burkholder	10:30 to 12 M	Medicine MacDiarmid	Surgical Clinic J. P H., Robertson & Gammage
11 to 12	Surgery MacKechnie McCauley Edgecomb	Surgical Pathology O'Connor	Surgery MacKechnie McCauley Edgecomb	Autopsies Cook Co. Hospital Herzog	Surgery MacKechnie McCauley Edgecomb	
1 to 2	Gynecology Lewis De Roulet	Eye Hanson Clin. Path. Sweek Pharm. Lab. Miller	Ward Walks Sec Clinics 2 to 5 at St. Anne's, Rhodes Ave., Jefferson Park, Columbia, Lake Side Columbus and Maimonides Hospitals Operations on The Cadaver and Dog	Gynecology De Roulet	Eye Hanson Clin. Path. Sweek Pharm. Lab. Miller	Obstetrics Dorland
2 to 3	Dispensary Clinics	Dispensary Clinics		Dispensary Clinics	Dispensary Clinics	Dispensary Clinics
3 to 4	Therapeutics Miller	Pediatrics Wade Stevens		Therapeutics Miller	Medical Pathology O'Connor	
4 to 5	Medicine Moran	Medical Pathology O'Connor		Medicine Apking	Medicine Moran	

SENIOR SCHEDULE (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9 to 10	Obstetrics Dorland	Surgery Robertson	Medicine Graves	Obstetrics Dorland	Dermatology Lieberthal	Medicine Graves
10 to 11	Surgery Byrnes	Surgical Clinic J. P. H. Robertson	Medicine Pollock	Surgery Clinic J. P. H. Heineck	Nose and Throat Clinic J. P. H. Grim	Medicine Pollock
11 to 12	Gynecology De Roulet	Medical Clinic Grace Hospital Funkhouser	Opthalmology Burkholder	Medical Clinic Grace Hospital Funkhouser	Surgery Clinic J. P. H. Marcusson	Gynecology De Roulet
1 to 2	Neurology Reading	Eye Clinic J. P. H. Bracken	Medical Clinic C. C. H. Williamson	Orthopedic Surgery Holmboe	Medicine Weis	Surgical Clinic Keyes C. C. H.
2 to 3	Surgical Clinic J. P. H. Breakstone	Medical Clinic Weis		Neurology Reading	Forensic Medicine Gammage Reinhardt	
3 to 4			Gynecology Clinic	Neurological Clinic C. C. H.	Genito Urinary Kreissl	Surgical Clinic Morf C. C. H.
4 to 5	Sanitary Science and Hygiene Lederer	Mental Diseases Physiologic Therapeutics Wood Burdick	C. C. H. Lewis	Dermatological Clinic C. C. H. Simpson	Medicine Clinic J. P. H. Pollock	

Schedule of Subjects Offered in Academic and Secondary Schools, Credits in Which are Acceptable for Entrance to the Preliminary College Year Leading to the Medical Courses.

SUBJECTS.	UNITS.	REQUIRED.	ELECTIVE.
ENGLISH			
Reading and Practice	2	2	...
Study and practice	1	...	1
MATHEMATICS			
Algebra to Quadratics	1	1	...
Algebra (Quadratic Equations, Binomial Theorem and Progressions)	½	...	½
Plane Geometry	1	1	...
Solid Geometery	½	...	½
Trigonometry	½	...	½
LATIN			
Grammar and Composition	1	1	...
Caesar	1	1	...
Ciero	1	...	1
Virgil	1	...	1
Cornelius Nepos	1	...	1
Greek			
Grammar and Composition	1	*	1
Xenophon	1	...	1
Homer	1	...	1
German (or French)			
Elementary	2	2	...
Intermediate	1	...	1
French (or German)			
Elementary	2	**	2
Intermediate	1	...	2
Spanish			
Elementary	2	...	2
Scandinavian			
Elementary	2	...	2
HISTORY			
American History and Civil Government	1	1	...
Greek and Roman History	1	...	1
Medieval and Modern History	1	...	1
English History	1	...	1
Science†			
Botany and Zoology, each	1	...	1
or Biology	1	...	1
Chemistry	1	...	1
Physics	1	...	1
Physiography	½	...	½
Physiology	½	...	½
Agriculture	1	...	1
Drawing	1	...	1
Manual Training	1	...	1
Domestic Science	1	...	1
Music			
Appreciation or Harmony	1	...	1
Total	38½	9	29½

A *unit* is the credit value of at least 36 weeks' work of 4 or 5 recitation periods per week, each recitation period to be of not less than 40 minutes. In other words, a unit represents a year's study in any subject in a secondary school constituting approximately a quarter of a full year's work. A satisfactory year's work in any subject cannot be accomplished under ordinary circumstances in less than 120 sixty-minute hours, or their equivalent.

Required Branches: Of the 14 units of high-school work the subjects in capitals aggregating 9 units are required. Other work to the amount of at least 5 units may be made up from any of the other subjects of the above schedule.

* Two units of Greek may be substituted for the two required units of Latin.

** Two units of French may be substituted for the two required units in German.

† Credentials of each science course must include evidence of laboratory work.

CHEMISTRY AND TOXICOLOGY.

Otto Charles Huber, B. S., M. D., Head of the Department.

CHEMISTRY.

FRESHMAN YEAR.

Course I.

Inorganic Chemistry: Lectures and recitations, three times each week throughout the Freshman year. The fundamental laws, theories, and principles of chemistry are studied from the standpoint of modern medical research and practice. The composition, phenomena attending change of composition, properties and use of the different kinds of matter are taken up in logical sequence from their historical, industrial, economic, physiologic and therapeutic importance, in order to give the student a comprehensive grasp of the subject. The toxicology of inorganic substances is taken up with the chemistry of the particular substance considered. 90 hours.

Laboratory Exercises: Four hours each week throughout the Freshman year.

First Term: Experiments are performed by the student bearing directly upon the class work offered. As many qualitative and quantitative reactions are introduced as possible to explain and illustrate the fundamental principles and laws of chemical action. 60 hours.

Second Term: In the first half of this term particular attention is given to the determination of unknowns. In the second half, gravimetric and volumetric methods of quantitative analyses are considered. Laboratory tests for various inorganic poisons are given. 60 hours.

SOPHOMORE YEAR.

Course II.

Organic Chemistry: As an introduction to organic chemistry, the aliphatic and the aromatic series are covered and studied from the viewpoint of recent medical research in this fundamental branch of chemical science, including the toxicology of the various organic poisons. 30 hours.

Laboratory: Four hours a week, first term. As many synthetic organic compounds are made in the laboratory as time will permit. They are taken from the didactic work and are selected mainly for their illustrative importance. After the

synthetic work is finished, various methods for detecting organic poisons are given. 60 hours.

Course III.

Physiological Chemistry, Lectures and recitations, three hours each week, second term. This course covers the whole field of general physiological chemistry. Proteins, fats and carbohydrates studied in detail. The digestion of food by enzymes and digestive agents, as well as the intermediary and end products are considered. The chemistry of urine, blood, milk and faeces is thoroughly presented. 45 hours.

Laboratory Work: Four hours each week, second term. Laboratory experiments are given covering the above work. These experiments include work on fats, carbohydrates, protein, enzymes, uranalysis, gastric analysis, milk analysis and fecal analysis. 60 hours.

TEXT-BOOKS.

Inorganic Chemistry—Holland, Simon.
Organic Chemistry—Holland, Simon, Remsen.
Physiological Chemistry: Reference—Hawk, Saxe, Holland, Purdy, Halliburton.
Synthetic Chemistry—Jones, Cohen, Lassar-Cohn.

DEPARTMENT OF PHYSIOLOGY.

FRANK MARION HORSTMAN, Ph.G., M. D., Head of Department.
D. M. DAVIDSON, B. S.

FRESHMAN OUTLINE.

First Term: Biology. Didactic, 250 pp. of text. Two hours per week. 30 hours. Laboratory, two hours per week. 30 hours.

Second Term: Physiology. Didactic. Circulation and respiration to chemical changes in air and blood caused by respiration. 230 pp. of text. Two hours per week. 30 hours.

Laboratory experiments in circulation and respiration, except air analysis, two hours per week. 30 hours.

SOPHOMORE OUTLINE.

First Term: Physiology. Didactic, 230 pp. of text. Respiration, beginning at chemical changes in air and blood during respiration.

Muscle-nerve physiology.

Digestion to composition of food and action of enzymes, two hours per week. 30 hours.

Laboratory air testing and experiments in muscle-nerve and proximate principles. 30 hours.

Second Term: Didactic, 250 pp. of text. Composition of food; action of enzymes. Liver and spleen. Kidneys and skin. Ductless glands. Nutrition and heat production and regulation. Properties of the nerve-cell. Reflex action. Special senses, except eye and ear. 30 hours.

Laboratory experiments in digestion and absorption, reflexes and special senses, except eye and ear. 30 hours.

The work in this department is carried on by means of lectures, demonstrations, laboratory work and recitations, the latter covering two hours per week during two years, and in physiology of the blood all instruction except the fundamentals is given in a special course in Hematology in the Junior year.

As a preparatory for the study of physiology proper, the student receives instructions in gross and microscopic anatomy, including visceral and nervous anatomy in the departments of anatomy and histology and also as a preparation for special physiology they are given a course of thirty lectures, thirty hours of recitation and thirty hours in Laboratory work in biology, in the department of physiology, including general physiology. The work in the Freshman year in special physiology consists of thirty lectures, thirty hours of recitation and thirty hours of laboratory work and covers the physiology of the circulatory system, the blood in part, and the mechanics of respiration. During the first term of the Sophomore year, thirty hours of lectures, thirty hours of quiz and 60 hours of laboratory work cover the work in respiration not covered in the Freshman year and also muscle and nerve physiology and digestion. During the second term of the Sophomore year the same number of hours is devoted to the subject as in the first term. The topics covered are composition of food, action of enzymes, physiology of the liver and spleen, excretion, ductless glands and nutrition and heat production and regulation. The tracing of nerve impulses and kindred topics is taken up in the department of neurology; and the physiology of the eye and ear is given in special courses for those subjects in the Junior year. Instruction in physiological chemistry is given in the department of Chem-

istry. Demonstrations in capillary circulation, blood pressure and circulation time in mammals, use of sphygmograph and sphygmomanometer, general physiology of muscle and nerve, etc., are all given to sections and never to the class as a whole. Each student is furnished with an outline of these experiments covered in the laboratory work and with the assistance of the professor in charge and two assistants he performs the experiments himself, as this is considered far superior to demonstrations, in all work in which it is applicable and this is the policy followed by this department in actual work, the students writing up fully the results and conclusions for each experiment performed, the demonstrations representing only the experiments which are too difficult for the student to perform for himself.

The part of physiology taken up in laboratory work covers physiology of heart, blood in part and circulation, respiration and digestion, muscle-nerve and the central nervous system, including reflexes, special senses, excepting eye and ear. The lectures and recitations cover the entire field of physiology proper, except eye and ear.

TEXTS.

Biology—Smallwood's Textbook in Biology.
Reference—McFarland.
Physiology—Howell.
Reference—Starling, Brubaker.

THE DEPARTMENT OF ANATOMY, HISTOLOGY, EMBRYLOGY AND NEUROLOGY.

Arthur Bennett Rankin, B. A., M. B., Head of Department.
Benjamin Edelstein Elliott, B. Sc., M. D.
Walter Franz Von Zelinski, B. S., M. D.
Reid Owen Howser, M. D.
Daniel James Paradine, B. S., M. D.
Henry Randall Kenny, A. M., M. B., B. Ch., B. A. O.
William Henry Gehl, M. D.

The department of Anatomy is organized to provide for instruction in vertebrate anatomy, including human anatomy, histology, embryology and neurology. The courses in these branches are given in the Freshman and Sophomore years. In

the Junior and Senior years small sections of the classes are instructed in surgical anatomy and operative surgery on the cadaver. The anatomy of the specialties, Ophthalmology, Rhinology, Otology and Laryngology, is studied under the direction of the heads of these departments.

The anatomical laboratory is situated on the top floor of the new wing. This laboratory is large and well lighted. Space is provided for twenty-five tables. Division of the classes into sections provides ample room for sucessful work. The courses in Histology, Embryology and Neurology are conducted in the large laboratory for microscopic anatomy, on the same floor as the dissecting room. Each student is supplied with a modern microscope and the necessary laboratory accessories.

Each student must present evidence of dissection of a lateral half of a cadaver. The work is divided into four parts: (a) Dissection of an arm; (b) Dissection of a leg; (c) Dissection of abdomen; (d) Dissection of head and neck and thorax.

Courses.

FRESHMAN YEAR.

(a) *General Anatomy:* An elementary course for the medical student on the anatomy of the circulatory, respiratory and gastrointestinal organs (2 hours a week). Professor Rankin. 60 hours.

(b) *Osteology:* This course is given during the first term and consists of didactic lectures (2 hours a week) and laboratory work (2 hours a week). The student is provided with bones or models of the same for study. Associate Professor Elliott and Assistants. 60 hours.

(c) *Regional Anatomy:* A didactic course consisting of two lectures a week covering the part being dissected; laboratory work consisting of dissection, drawings and rigid quiz work. This course, comprising 16 hours a week, is continued throughout the year. Professor Rankin, Associate Professor Elliott, Drs. Howser, Kenny, Paradine and Gehl. 480 hours.

(d) *Cytology, Histology and Embryology:* A brief introductory course on the structure of the cell and the classification of tissues, followed by a systematic study of the structure of the organs and human embryology. This course is given during the second term; it consists of didactic lectures (2 hours a week) and laboratory work, consisting of stain-

ing, mounting and microscopic study of normal human tissues, illustrated by lantern demonstrations (6 hours a week). Professor Rankin and Assistants. 240 hours.

SOPHOMORE YEAR.

(a) *Regional Anatomy:* Didactic lectures (2 hours a week) and laboratory work (10 hours a week), covering the remaining parts to be dissected. This course is continued throughout the year. Professor Rankin, Associate Professor Elliott, Drs. Howser, Kenny, Paradine and Gehl. 360 hours.

(b) *Neurology:* Didactic lectures (2 hours a week) and laboratory work (4 hours a week) during the second term. This course consists in the study of the gross anatomy of the sheep's brain and human brain and cord. Professor Rankin and Assistants. 90 hours.

JUNIOR AND SENIOR YEARS.

(a) *Surgical Anatomy and Operative Surgery on the Cadaver:* This course is given in the anatomical laboratory under the direction of the department of surgery. 60 hours.

(b) *Anatomy of the Ear, Eye, Nose and Throat:* A special course conducted under the direction of the head of this department.

DEPARTMENT OF BACTERIOLOGY, PATHOLOGY AND HYGIENE.

Maximilian J. Herzog, M. D., LL. D., Head of the Department.
Arthur Lederer, M. D.
William Oscar Sweek, M. D.
Cleveland Charles MacLane, M. D. C., Assistant.
June Edmondsen, Assistant and Curator of the Museum.
Mary Mulcahy, M. D., Assistant.
H. P. Freemann, M. D., Assistant.
Halder Carlsen, M. D., Assistant.

Laboratories: The Bacteriological and Pathological laboratories are found on the fourth floor of the main building. They are well ventilated, clean, and with the advantage of the north light for microscopic work. The laboratories are well equipped with apparatus for all kinds of work in Bacteriology and Pathology and include microscopes, complete with oil immersion lenses, apparatus needed for preparing culture media, etc. An assortment of reagents and museum specimens of pathological conditions are found in the Museum to which considerable additions have recently been made.

Bacteriology and Protozoology.

Second year: First Term.
Two lectures per week—(30 hours.)
Recitations—1 per week—(15 hours.)
Laboratory: 2 periods per week at 3 hours—(90 hours.)

This subject is taught in lectures and recitations and in the laboratory. The lecture course will first deal with general bacteriology such as morphology and biology, etc. Under this head also will be taken up Ehrlich's side chain theory of immunity, the different serum reactions including the complement fixation test (Wassermann test,) etc. The more important non-pathogenic and all of the important pathogenic bacteria will be studied, particularly in the laboratory course where the student will become familiar with the methods of preparing culture media, obtaining pure cultures, observing bacteria in the live state and in permanent stained specimens. The latter must be drawn and described. Such tests as the Widal test, the Wasserman test, etc., will be demonstrated and practiced by the student.

This course also includes the study of the microscopic

diagnosis of rabies and of the most important microbic tropical diseases and of such protozoa as plasmodium malariae, amoeba histolytica, trypanosoma, the Donovan-Leishman bodies, piroplasma, sarcosproidia, etc.

General and Special Pathology.

Second year: First Term, General Pathology.
Two lectures per week—(30 hours.)
Recitation—1 hour per week—(15 hours.)
Laboratory: 2 periods per week at 3 hours—(90 hours.)
Second year: Second Term, Special Pathology.
Two lectures per week—(30 hours.)
Recitation—1 hour per week—(15 hours.)
Laboratory: 2 periods per week at 3 hours—(90 hours.)
Second year: Second Term.
Laboratory lectures and demonstrations on the intestinal parasites of man and the domestic animals.
One lecture per week—(15 hours.)

The subject of Pathology is taught by systematic didactic lectures, by recitations, autopsies and in the laboratory. The lectures will cover the whole domain of general and special pathology and they will be illustrated by means of post-mortem specimens prepared by the Kaiserling method, microscopic sections and lantern slides projected on the screen. The laboratory course in pathology is given by the professor and his assistants in connection with and following the lectures and demonstrations. Particular stress is laid upon the laboratory course in general pathology, which necessarily must form the foundation for all studies in histo-pathology. No student can ever expect to acquire any degree of skill in microscopic pathologic diagnosis unless he masters general pathologic histology. Hence the students will be required to stain and mount a complete set of 100 or more sections representing such subjects in general pathology as disturbances of circulation, thrombosis and embolism, edema, hemorrhage, necrosis, degenerative cell changes, gangrene, cloudy swelling, fatty infiltration and degeneration, fat necrosis, hyaline degenerations, cornification, petrification, ossification, pathologic pigmentation, regeneration, atrophy and hypertrophy, inflammation acute, subacute and chronic. The infectious granulomata like tuberculosis, syphilis, actinomycosis, glanders, botryomycosis, blastomycosis and finally tumors, benign and malignant, connective tissue—epithelial and mixed neoplasms will be thoroughly studied in sections. The student

will be required to draw and describe each section mounted, his collection of sections and his drawings and descriptions will form part of his record and grade in pathology.

Special pathology will likewise be studied in the laboratory and the students will be required to prepare, draw and describe the sections.

The students will also be familiarized with the common methods of fixing, embedding and sectioning pathologic material, the use of the microtome, etc.

Intestinal parasites of man and the domestic animals. This subject will be taken up in laboratory lectures and demonstrations during the sophomore year in the second semester.

Autopsies. Post-mortems are held at the Cook County Hospital by the head of the department who is one of the pathologists of this institution. Each student must attend at least thirty autopsies and he must furnish at the end of his junior year at least 30 complete post mortem protocols of autopsies which he has attended. Pathologic material will be collected at the autopsies and will be worked up in the laboratory and studied by the students. A limited number of students will be permitted to attend autopsies held by the head of the department and his assistants in other hospitals.

Hygiene and Sanitary Science.

The course in Hygiene and Sanitary Science will be given by Associate Professor Lederer. It will consist in lecture work and practical demonstrations. The subjects covered will be on the hygiene of the principal foods such as meat, milk, vegetables, beverages, on food preservation, adulteration, on air, water, sewage and their relation to disease, on ventilation, disposal of garbage, disinfection, occupational diseases, vital statistics, personal hygiene, etc. Excursions will be arranged to places of interest in connection with the didactic work.

Research Work in the Department of Pathology, Bacteriology and Hygiene.

A limited number of advanced students, who have shown special aptitude will be encouraged to pursue research work. This will be conducted under the direction of the head of the department in the *Lorimer Foundation St. Rita's Research Laboratory* recently installed on the second floor of the new wing of the College Building. It is primarily desirable that most of the research work undertaken in this laboratory be

along the lines of studies in tuberculosis, but the experimental investigation of other pathologic and bacteriologic problems may exceptionally be permitted.

Journals kept in the Department of Bacteriology, Pathology and Hygiene:

Annales de l'Institute Pasteur.
Archiv f. Pathol. Anatomie u. Physiol. (Virchows Archiv.)
Archives de Medecine Experimentale.
Beitraege zur Pathol. Anatomie u. Allgem. Pathol. (Zieglers Beitr.)
Ergebnisse der Allgem. Pathol.
Bulletin Johns Hopkins Hospital.
Journal Experim. Medic.
Journal Infectious Diseases.
Journal Pathology and Bacteriolgy.
Zeitschrift fuer Immunitaetsf. (Originale.)
Zeitschrift fuer Immunitaetsf. (Referate.)
Zeitschrift f. Infektionskrankheiten.
Zentralblatt f. Allgem, Pathol.
Zentralblatt f. Bacteriologie.
Journal of Medical Research.
Verhandl. d. Deutsche Pathol. Gesellschaft.
Frankfurter Zeitschrift f. Pathologie.
Journal of Comparative Pathology.
Philippine Journal of Science.
Revue de la Tuberculose.
Zeitschrift f. Tuberkulose.

DEPARTMENT OF THERAPEUTICS AND PHARMACOLOGY.

Charles Henderson Miller, M. D.
Head of Department.
Elmer Holmes Flinn, M. D.
Richard Jay Lambert, Ph. G., M. D.
Leo Steiner, M. D.

The Department is organized and equipped for teaching the subject in accordance with the latest scientific conception of laboratory instruction.

The Materia Medica Laboratory work comprises a critical study of crude drugs; preparation of an individual materia medica cabinet of thirty-six specimens; a comprehensive

synopsis of essential facts relating to all important drugs by each sudent; manufacture by the student of representative preparations under instruction.

The experimental study of the action of medicines is undertaken in a laboratory equipped with all essentials, including kymographic tracings of the influence of the more important drugs.

The didactic work includes lectures and recitations in equal numbers. In the Freshman year Materia Medica is taught by one lecture and one recitation a week. 30 hours. In the Sophomore year by one lecture and one recitation a week. 30 hours. In the Junior year the work in Therapeutics consists of a critical study of the physiological action of medicines, tracing out their specific influences upon the various corporeal systems. The therapeutic indications based upon the physiological action follow as a natural process of reasoning. The technical methods are exemplified by the writing of extemporaneous prescriptions suitable for a large number of hypothetical cases. These prescriptions are revised by the instructors and returned with comments to the students.

The course is so graded that the student passes from the simple study of the properties of medicines to the knowledge of their actions, and thence to the knowledge of their indications in combatting diseased conditions.

The course for Juniors includes one recitation and one lecture a week, (60 hours,) and two hours a week of laboratory work (60 hours.)

DEPARTMENT OF MEDICINE.

NATHANIEL ABRAHAM GRAVES, A. B., M. D., Head of the Department.
WILLIAM JOHN POLLOCK, B. S., M. D.
JOHN VOSBURG STEVENS, M. D.
ARTHUR HENRY WEIS, M. D.
ROLAND HODGES PHILLIPS, Ph. G., B. S., M. D.
CHARLES ALBERT WADE, M. D.
OSCAR BRUNK FUNKHOUSER, M. D.
ALBERT CHARLES APKING, M. D.
CLEVELAND SHAMBAUGH, M. D.
HERMAN BOHL, M. D.
LEO STEINER, M. D.
LESLIE FRANCIS MACDIARMID, M. D.
DANIEL JAMES PARADINE, B. S., M. D.
JAMES H. MORAN, M. D.

Course I.

The subject of Medical and Clinical Diagnosis is taught in the Junior year. The students will be required to make examinations of the urine, sputa, stomach contents, and make blood counts on all clinical material which requires such examinations, thus making them proficient in the work. The report of such examination is to be filed with the history of the case for record and as an aid to the clinical instructor. The laboratory work will be supplemented with lectures and quiz work on the subjects taught under this heading. An average of four hours per week will be required for this course. 120 hours.

Course II.

This course will be on the important subject of Diseases of Children. The subject will be taught to the Juniors by recitations and clinics three hours per week. A thorough course on infant feeding has been planned, including the artificial foods and their respective values and the modifications of foods. Lectures and quizzes on all the diseases of infancy and childhood will be a regular part of this course and the abundant clinical material at our free clinic will give ample opportunity for the student to become familiar with the clinical forms of the diseases and watch the results of careful medication. 90 hours

Course III.

General Medicine: This course has been very carefully graded and is given to the Junior and Senior students.

We fully realize that after students have received instruction in the fundamental branches, that this is their most important study, for when they begin actual practice they will see and treat more cases in general medicine than in all the other subjects put together; therefore, we aim to make the instruction in this branch so thorough that when the student has finished the course he will be able to diagnose and treat intelligently any of the diseases in general medical practice.

It is our aim to give the students confidence in medicine, and to drill them so thoroughly in the application of remedies to certain definite diseased conditions that they may get the best possible results from the use of such remedies.

In the Junior year we are allotted eight hours per week for this subject and the course consists of lectures, recitations and clinics, particularly of the class of cases that are covered in the recitation work, so that each disease, as far as possible, is illustrated in this manner. 240 hours.

In the Senior year we also have eight hours per week devoted to general medicine and in this year of the work it is our aim to teach everything that is practical in general medicine, so that when the student leaves the college he will go with that confidence in medicine that he will apply it successfully and he will go with the idea that he must study each individual case and apply his remedies according to the conditions found present. 240 hours.

The Senior class will be required to attend clinics at Jefferson Park Hospital, Cook County Hospital and other hospitals which may be arranged for, and under the direction of the instructor examine, diagnose and prescribe for the clinic patient. This will give them instruction in obtaining the history of the case, physical examination, differential diagnosis, the application of remedies to the conditions found present and prescription writing.

We will endeavor as nearly as possible to arrange the lecture course so that we may get clinic cases to illustrate the work.

DEPARTMENT OF SURGERY.

JOHN DILL ROBERTSON, B. S., M. D., Head of Department.
AIME PAUL HEINECK, M. D.
WILLIAM BERINGER MARCUSSON, B. S., M. D.
ANTON THEODORE HARRIS HOLMBOE, M. D.
BENJAMIN HARRISON BREAKSTONE, B. S., M. D.
FRANK BYRNES, M. D.
HUGH NEIL MACKECHNIE, B. A., M. D., C. M.
THOMAS DOWNES LAFTRY, M. D.
WILLIAM BERNARD MCCAULEY, M. D.
GEORGE LUDWIG APFELBACH, M. D.
CHARLES WILLIAM CLARK, M. D.
JOHN JOSEPH MEANY, M. D.
ALBERT HOWARD CARTER, M. D.
ARTHUR EDISON GAMMAGE, M. D.
JOHN HAROLD EDGECOMB, M. D.
ANDREW COSMAS GARVY, M. D. JACK MOSES, M. D.

In this department everything pertaining to the Science and Art of Surgery is taught. The student begins his training in this department at the beginning of his second year. He is taught Asepsis and Antisepsis, the preparation of the patient for the operation, the preparation of the surgeon to do the operation, the sterilization of instruments, gowns, gauze dressings, the use of rubber gloves and all the small, but essential, details of modern surgery. 30 hours.

In the third year the work begun in the second is continued as follows:

Third Year.

1—Didactic Surgery, General and Special. Sections of the class meet three hours a week under each of the following: Professor MacKechnie and Assistant Professors Edgecomb and McCauley. 90 hours.

2—Surgical Pathology, two hours each week under Professor O'Connor. 60 hours.

3—Operative Surgery, cadaver and dog, laboratory, divided classes, three hours each week for four weeks under Professor Rankin and assistants. 12 hours.

4—Surgical Diagnosis, clinical, at Jefferson Park Hospital, two hours each week throughout the year under Professor Robertson and Assistant Professor Gammage. 60 hours.

5—Dispensary Clinic at Bennett Medical College, divided

classes, five times a week for four weeks, daily between 2-3. 20 hours.

6—Surgical Clinics, divided classes, three hours each week for four weeks at each of the following hospitals: 90 hours.

Jefferson Park, Dr. Laftry, Dr. Gammage, Dr. Moses.
Rhodes Avenue, Dr. MacKechnie.
St. Anne's, Dr. Meany.
Columbia, Dr. O'Neill.
Lakeside, Dr. Johnstone.
Columbus, Dr. Byrnes.
Maimonides, Dr. Breakstone.
Cook County, Dr. Lewis.
Total 322 hours.

Fourth Year.

1—Surgical Clinic, two 2-hour periods each week at Jefferson Park Hospital, under Professor Robertson and Professor Heineck. 120 hours.

2—Surgical Clinic, two 1-hour periods each week at Jefferson Park Hospital, under Professor Marcusson and Professor Breakstone. 60 hours.

3—Surgical Clinic, one 2-hour period each week at Cook County Hospital, under Professor Lewis. 60 hours.

4—Clinical Lecture, one hour each week, Orthopedic Surgery, Professor Holmboe. 30 hours.

5—Clinical Lectures, two hours each, by Professor Robertson and Professor Byrnes. 60 hours.

Total 330 hours.

DEPARTMENT OF OBSTETRICS.

William Alexander Newman Dorland, A. M., M. D., Head of Department.
William Rittenhouse, M. D.
Mary Mulcahy, M. D.
Thomas Gale Wallin, M. D.

This course is conducted throughout the third and fourth years. The instruction comprises lectures, recitations, demonstrations out-patient and hospital clinics and exercises with the mannikin.

Junior Year: The Physiology of Pregnancy, Labor and the Puerperium. Lectures two hours a week; recitations two hours a week. 120 hours.

Senior Year: The Pathology of Pregnancy Labor and the Puerperium. Lectures two hours a week; recitations two hours a week. 120 hours.

Clinics at the Jefferson Park hospital, and other hospitals on Midwifery; Clinics at patients' homes under charge of an instructor. An extra charge of ten dollars is made for this course.

Practical exercises on the obstetric mannikin; to the class in small sections.

Text-books: Dorland's Modern Obstetrics, Peterson's Obstetrics.

DEPARTMENT OF GYNECOLOGY.

Henry Foster Lewis, A. B. M. D., Head of Department.
Alfred de Roulet, M. S., M. D.
Stuart Johnstone, M. D.
Thomas Albert Carter, M. D.
Frances Helen Cook, M. D.
Arthur Caldwell Gillam, A. M., M. D.
Henry Randal Kenny, A. B., M. B., B. Ch., B. A. O.

This course is conducted throughout the third and fourth years. The instruction comprises lectures, recitations, demonstrations, out-patient and hospital clinics.

Junior Year: Lectures and recitations on the Anatomy and Physiology of the Female Genital Organs; 60 hours. Methods of Gynecological Examination and Diagnosis; Functional Gynecological Disorders.

Clinics at the Jefferson Park and other hospitals on Diseases of Women. Dispensary Clinics daily.

Senior Year: Lectures and recitations on the Pathology and Treatment of the Female Genital Organs. 60 hours.

Clinics at the Jefferson Park, Cook County Hospital and other hospitals on Diseases of Women. Clinics at the College Dispensary and other dispensaries on Diseases of Women.

Personal attendance at the wards of the Jefferson Park Hospital and other affiliated hospitals, where the students in

rotation will be required to assist in the diagonsis and treatment of patients under the personal charge of members of the faculty. Text-book: Crossen's Diseases of Women.

DEPARTMENT OF OPHTHALMOLOGY.

Jacob Franklin Burkholder, M. D., Head of the Department.
Douglas Amos Payne, M. D.
Elzear LaMothe, M. D.
Carl Wagner, M. D.
Eva Hansen, M. D.

The work in this department is designed to meet the requirements of those intending to become general practitioners of medicine. The instruction is thoroughly practical and consists of the following courses:

Course I.

JUNIOR YEAR.

The work in this course will consist largely of laboratory exercises and clinical demonstrations. The class will be arranged in small groups of students in order that each may have personal instruction.

The preliminary work will embrace the study of the gross anatomy of the eye and its appendages. Bullocks' eyes are frozen and cut, and then allowed to thaw under water, insuring a minimum of disturbance in structural relationships. Sections through the equatorial and sagittal meridians are drawn and studied. This exercise will give the student a knowledge of the anatomy of the eyeball in these dimensions.

The study of the gross structures of the eye will be followed by histological demonstrations and drawing. The minute anatomy of the important tissues will be studied with reference to physiology, pathology and etiology.

The student will be initiated, during this course, into the value of the ophthalmoscope to the general practitioner. Exercises will be carried on by means of the schematic eye.

Attention will be given to the various ophthalmic manipulations, as oblique illumination, everting the lids, removal of foreign bodies from beneath the lid, etc.

Elementary refraction will be considered, and its correlation to local and general symptoms explained. Once a week. 30 hours.

Text-book: May.

Course II.

SENIOR YEAR.

Systematic lectures will be given on the commoner diseases of the eye and lids. Special attention will be given to the differential diagnosis of ocular diseases.

Consideration will be given to the prevention as well as the treatment of the serious conjunctival inflamations.

The study with the ophthalmoscope will be continued in this course.

The relationship of the eye to general diseases and the far-reaching influences of errors in refraction and their complicated reflexes will be explained.

The minor surgical operations will be demonstrated on the cadaver. Once a week. 30 hours.

Text-books: Weeks, Fuchs, Parson.

DEPARTMENT OF RHINO-OTO-LARYNGOLOGY.

Ulysses Joshua Grim, M. D., Head of Department
William Allen Porter, M. D.

In the work of this department clinical teaching will be the special feature.

JUNIOR YEAR.

Lecture once a week. 30 hours.
Clinic, one hour a week to class in sections. 30 hours.
Minor practice to sections.

SENIOR YEAR.

Clinic once a week at college. 30 hours.
Clinic twice a week in sections at Illinois Charitable Eye and Ear Infirmary. 60 hours.

Practical course in ear and nose surgery on cadavers and animals to advanced students. Elective.

Text-books: Ballinger, St. Clair Thompson, Wendell Phillips, Gleason.

DEPARTMENT OF DERMATOLOGY AND SYPHILOGRAPHY.

DAVID LIEBERTHAL, M. D., Head of the Department.
KASIMIR AMBROSE ZURAWSKI, M. D.

Junior Course: Weekly lecture. First month of the first term. Introduction into dermatology—physiology of the skin—demonstration of histology by projection on screen. Didactic lectures thereafter: Special dermatology illustrated by plates, photographs and by demonstration of patients. 30 hours.

Senior Course: First term: Weekly lecture on syphilis of the skin and the mucous membranes with demonstration of spirochetae by dark-field illumination, and by stained specimens. Demonstration of plates and patients. 15 hours.

Second term: Lectures on special dermatology, illustrated by plates, photographs and patients. 15 hours.

During both terms bi-weekly clinical lectures at the College or at hospitals to classes of not more than twenty students, the list changing monthly in rotation. 30 hours.

Text-books: Stelwagon, Morris, Jackson, Taylor, Keyes.

DEPARTMENT OF NERVOUS AND MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

EDGAR MEAD READING, A. M., M. D., Head of the Department.
HENRY GEORGE WILLIAM REINHARDT, M. D.
ARTHUR E. GAMMAGE, LL. B.
THOMAS HOGAN, LL. B.
JOHN FRANCIS TYRRELL, A. B., LL. B.

Course I.

The diseases of the brain and nervous system are taught to the Senior class by lectures, recitations and clinics twice a week. 60 hours.

Neurological Anatomy is taught in a special course in the anatomical department.

Course II.

This course is taught to the Senior class and deals with the legal subjects of interest to the medical graduate. The subjects of malpractice, expert testimony, the legal aspects of

impotency, sterility, rape, pregnancy, legitimacy, infanticide, wounds, poisons, feigned disease and survivorship are thoroughly discussed. 30 hours.

Course III.

Neurology.

The work given in this section will be under the charge of Dr. J. F. Burkholder, and will be entirely devoted to the study of the physiological anatomy of the central nervous system and the neuron. The gross anatomy will be largely a review of the laboratory exercises of the preceding year, with special demonstrations on the human encephalon.

The study of the neuron body will receive particular attention, for the reason that in the brain, as in other tissues, the cell is the anatomical as well as the physiological unit. Slides of nerve tissue, stained by the various processes, as Nissl, Golgi and Pal-Weigart, will be supplied to the student for study and drawing. This will give him a working knowledge of the morphology and internal architecture of the neuron body that can be acquired in no other way. Professor Burkholder and Assistants. 40 hours.

Text-book: Reading's Lecture Notes. Allchin.

DEPARTMENT OF GENITO-URINARY DISEASES.

Felipp Kreissl, M. D., Head of the Department.
L. J. Day, M. D.

The work of this course is carried on by recitations and clinics and all of the diseases of the Genito-urinary system are studied in the senior year. 30 hours.

The clinical work is conducted in the college building every afternoon between 2 and 3 p. m., except Sundays. Also at the Jefferson Park and other hospitals, where there is an abundance of clinical material. 30 hours.

The student is taught the intravenous method of Salvarsan treatment, the use of the urethroscope, cystoscope and other instruments employed in this class of cases for diagnostic and therapeutic purposes. Each student is also required to personally examine and treat the patients under the supervision of the teacher.

DEPARTMENT OF PHYSIOLOGIC THERAPEUTICS.

Noble Murray Eberhart, A. M., M. S., M. D.,
Head of Department.
Gordon Granger Burdick, M. D.

Realizing the importance of the application of therapeutic agents outside of drugs, the College has established a Department of Physiologic Therapeutics, which will include instruction in the use of all electrotherapeutic measures (including galvanism, faradism, high frequency, X-ray, etc.), and will also include vibration, phototherapy, hydrotherapy, psychotherapy, serotherapy and other non-drug methods.

Instruction in the X-ray will be supplemented by practical work in the Jefferson Park Hospital, where students will be taught the technique of making and interpreting X-ray pictures, under the supervision of the Head of the Department. 30 hours.

DISPENSARY CLINICS.

The clinic is divided into ten departments for the study of the various diseases. Every student is assigned to a given room for a stated period, when he is transferred to another, and in that way each must devote a certain portion of his time to each clinic. The members of the clinical staff are in attendance from 2 to 3 p. m., daily, throughout the year, except Sundays and holidays.

The work is so arranged as to give every student the best possible advantage in making diagnoses, outlining treatment, which includes a review in prescription writing and the physiological action of drugs. An attending physician in each room assists the student, confirming his diagnosis, writing the prescription, and quizzing over the different points of interest with each patient.

The clinical laboratory is also arranged in this department, where students are assigned to a period of laboratory work. In this work they get the same experience as if in a private laboratory in their own office, making examinations of specimens which are collected throughout the clinic.

Students who fall short in their attendance in the regular clinic hours during the year must attend clinical work during the summer.

Students must conduct themselves in a decorous manner in the clinic rooms, and patients must be treated with the same consideration as in a private office.

Students are not allowed in any clinic room but that to which they are assigned, except by permission of the instructor to whom they are assigned, nor can they get credit for attendance unless they are actually present at roll call and remain in attendance.

All students entering the clinic must provide themselves with the following instruments: Clinical thermometer, stethoscope, head mirror, ear speculum, ear syringe, nasal speculum, tongue depressor, laryngoscopic mirrors, probes and applicators.

Students not providing themselves with these instruments of diagnosis will not be permitted to attend.

JOHN VOSBURGH STEVENS, M. D., Superintendent.

GENERAL INFORMATION.

The Bennett Medical College "Year Book" is published during each school year, and contains valuable data concerning the college, present school body and Alumni. It is handsomely printed and neatly bound and sells for $2.00.

The Academy (St. Ignatius College) is located at 1076 West Twelfth St., corner 12th St. and Blue Island Avenue. To reach the College from Loop District take either the 12th Street surface car or Blue Island Avenue surface car.

The Loyola University is located on the North Side of Chicago, a campus of 29 acres extending from Devon Avenue to the Lake. An Evanston car on the Northwestern Elevated Railway, will land you at the entrance to the grounds.

Students who desire to combine a general course with their professional studies and secure a B. S. and M. D. degree, may accomplish this purpose by pursuing work at the Loyola University in connection with their four years' course in Bennett Medical College.

ALUMNI ASSOCIATION.

Officers:

ARTHUR EDISON GAMMAGE, M. D., President, Chicago.

ELEANOR FISH, M. D., Secretary, Chicago.

The annual meeting of the Alumni Association will be held at the College Building, corner of Ada and Fulton Streets, June 14th, 1914, at 10 a. m.

Each year shows a growth of interest in this annual meet. ing. Two days of exercises and history by members of the Alumni, Reception and Banquet, Special Clinics, visiting points of interest in the city, makes up a program intermingled with features of both pleasure and profit.

Every member of the Association is urgently requested to respond to the invitation that will be mailed him, and to become an active factor in the growth of the University. The membership of the Alumni Association includes all the graduates of the Bennett Medical College, Illinois Medical College, Reliance Medical College and Dearborn Medical College.

The total number of Alumni of these schools is 2,700 making one of the largest Medical Alumni Associations in Chicago.

Bennett Medical College maintains a Bureau of Information for its graduates. Among other things, hospital positions, new openings for practice, opportunities for locum tenens work, etc., are recorded.

It is very important that the exact address of each alumnus be on file in the office. Furthermore, at this time request is made of each alumnus that he keep the office informed as to his movements and his progress in professional work, including appointments, publications, or honorary recognitions which may come to him. It is desired to keep on file all data concerning our alumni for historical purposes.

All correspondence relative to Medical Alumni Association matter should be addressed to Eleanor Fish, M. D., 919 Winthrop Court, Chicago, Ill.

COMBINED COLLEGIATE AND MEDICAL COURSE.

The college of Liberal Arts in the Loyola University, with which Bennett Medical College is affiliated, offers to students through its Preparatory Department a course especially arranged to fit the need of students preparing to take the Medical Course.

It is recommended that all students who contemplate entering Bennett Medical College take the Preparatory Course. Those who have not completed the four years of High School work should communicate with the Dean of the Institution as early as possible.

The Preparatory Work consists of the following studies:

Each candidate is to show that he is entitled to receive a total of thirty points.

Latin Grammar and Latin Prose Composition, required 2 points.

English Grammar and Rhetoric, required 4 points.

Algebra, required 2 points.

Plane Geometry, required 2 points.

Physics, required 2 points.

History, including Political Economy and Civics, required 3 points.

Total points required, fourteen. Sixteen more points must be earned by a successful examination in a sufficient number of the following subjects: English Language and Literature, 4; Latin to a maximum of six points besides the required two points; German, French, Spanish and Greek, minimum for each, two points, maximum, eight; Solid Geometry, one; Trigonometry, one; Biology, two; Zoology, one; Botany, one; Chemistry, one; Physical Geography, one; Geology, one; Physiology and Hygiene, one; Astronomy, one; Drawing, one; making in all thirty points.

Everything included in this Preparatory Medical Course and in the First Year college course, is taught with the idea of thoroughly fitting the student for the study of Medicine, and no time is lost in those subjects which do not have a direct bearing upon this study.

The avowed policy of the University in all its departments is to encourage in every way the gaining of a broad general education as a foundation for the work of a profession.

In no profession is there greater need for such education than in medicine. As a preliminary step in this direction the Collegiate and Medical Departments offer an optional six-year course, including two years of collegiate work in arts and sciences, followed by two years of study in the fundamental branches of medicine. Upon the completion of the following two years of clinical study, that is, at the end of the combined six-year College and medical course, the degrees of Bachelor of Science (B. S.) and Doctor of Medicine (M. D.) are conferred.

As an entrance requirement, the student must have completed the Academy or High School course, or its equivalent.

GRADUATED ON SEPT. 26, 1912.

Brown, Aubrey Kenna
Brunswick, Edwin Lewis
Hinn, Otto William
Horn, Max A.
Houston, Ulysses Lincoln
Kirmse, Alvin Theron
Swarz, George
Walker, Benjamin Ulysses

GRADUATED JANUARY 20, 1913.

Androp, Serge
Christenson, Emil Martinus
Cleary, Joseph Patrick
Collins, Samuel Jones Blanchflower
Connolly, Thomas James
Crapple, William
Fisk, Roy Earl
Gaines, Mark Cyrus
Hardeman, George Washington
Hoesley, Henry Franklin
Kline, Roy William
Legris, Louis Joseph Agrapit
Schlack, Otto Charles

GRADUATED JUNE 20, 1913.

Ahner, Charles Louis
Atherton, Mary Jean
Beaudette, Joseph Wilbur
Bryson, Edmond Jones
Carlsen, Haldor
Carneal, Thomas Edgar
Corman, Verne Martin
Cross, Clara Glines
Davis, Arthur Lee
Ellis, Lewis Charles
Freeman, Horatio Putnam
Fulliam, Edmond Bland Ballard
Gates, George Francis
Gehl, William Henry
Gillespie, Orville Floyd
Hearn, Harry Elton
Hill, Harry Alonzo Kellor
Hooper, Clara Addleman, A. B.
Hundtermark, Albert Herman
Hutchinson, Roy Matthew
Juhl, Erik, B. S.
Kail, John William
Kellar, Vincent F.
Kersten, Marie E.
Lynch, Charles F.
Magill, Ansel Oswald
Magill, Samuel Rufus
Metheny, Samuel Earl
Mulcahy, Mary A. B.
Neiwig, Alfred George.
Neumeyer, William H.
Phillips, Fred Monroe
Potter, Ralph Edgar
Parsonnet, Aaron
Reed, Russell Soule
Rodaway, Roy Thomas
Schott, Otto Julius
Simerall, Harry Alex.
Skleba, Leonard Frederick
Stoycheff, Alexander Braganoff
Tietze, Herman Christian
Vachout, Marie A.
Wallin, Thomas Gale
Wehrle, Louis Gilbert

MATRICULATES FOR THE SESSION OF 1912-1913.

Abbreviations for periods of attendance:

No mark—Entered September, 1912.
Letter S—Entered June, ——.
Letter W—Entered January, ——.

FRESHMAN CLASS.

ALDEN, JOHN FREDOLPH
BENGOA, JOSE THOMAS
BENKENDORF, BERNARD
BRYAN, ALANSON LEROY
BOEHM, ROBERT GUSTAV
BYRNE, MAURICE WILLIAM K.
BOYER, CARL ELMER
BLANCHETT, RAYMOND J.
BURKE, ALEXANDER W.
BRANDON, WALTER LEE
BLACK, BYRON BAYARD
BRONSTEIN, SAMUEL O.
BARTON, W. C.
CHITTY, ROBERT L.
CICOTTE, FREDERICK J.
CRAIG, GLEN E.
CLARK, ROBERT
DAVIDSON, FINIS F.
DIXON, WILLIS L.
DUNHAM, ROYAL W.
DITTMORE, GEORGE W.
DUBEAU, EDWARD WILLIAM
DEBECK, CALVIN MORGAN
DE HES, MAX
ETERNO, JAMES
FALK, HERMAN W.
FELDMAN, WILLIAM
FELDMAN, MAX
FELDMAN, BENJAMIN
FOUGERAT, ROBERT C. FRONTERO
FELDOTT, E. A.
GALLOWAY, CHARLES E.
GBURCZYK, FRANK H.
GEORGE, RAYMOND H.
GLOVER, CHARLES W.
GRAVES, NATHANIEL VAN
GUNDRUM, MARK DUANE
GUY, EDWARD LEWIS
HERSCHEL, GEORGE E.
HUDDELSTON, WARREN A.
HIGHSMITH, CHARLES OTTO
HIGHSMITH, L. B.
HANEY, IRL S.
HARRELL, C. F., W-13
HENNESSEY, RUSSELL
HEILIGENSTEIN, RUDOLPH, W-13
HRADMANSKY, CHARLES, W-13
HARRIS, CLARENCE P., W-13
HOLLIS, J. E., W-13
HOLLIS, J. B., W-13
JACKSON, LEWIS
JOHNSON, JOSEPH A.
JONIKYS, J. J.
KRUSE, HENRY
KATZOWSKY, LEWIS JOSEPH
KABAL, ANTHONY J.
KELLY, RAYMOND MARTIN
KIRKPATRICK, R. R. W-13
KLEIN, GEORGE A.
KALISZ, WALTER J.
KEGEL, A. H.
LINDHOLM, HENNING O.
LITTLE, HARVEY THOMAS
LOPEZ, ALEJANDRO O.
LANGFORD, EARL K.
MCGUIRE, T. F.
MARIANI, MIGUEL A.
MCSPARIN, JAMES M.
METHENY, HARRY BOHN
MOCK, FRANK XAVIER
MOHR, WALTER
MCNERTNEY, ARTHUR
MALONE, LEO VINCENT, W-13
MODERT, ALSON W., W-13
MEYER, ELMER H.
MAYER, EMIL V., W-13
MAURER, ROY FRANK, S-12
NEILSON, CARL MARTIN
NICHOLSON, NILS H., W-13
O'FARRELL, PATRICK
O'GRADY, GEORGE E., W-13
OMENSKY, DAVID, W-13
ORTIZ, JAMES B. NOGUEROS
OTTOW, ALBERT
OVERHOLZER, WALTER C.
PASSARELLO, FRANK A.

Pellettiere, John
Pendergraft, Roy O., W-13
Pickett, William J.
Provost, Benjamin W., W-13
Read, William Roscoe
Restos, Yugo Hernandez
Rivera, Virgilio Aponte
Salinas, Miguel S.
Scholl, Eleanor Cushing
Showalter, Irene Helen
Sodora, Anthony, W-13
Soldinger, Joseph
Stepanski, Helen Fadora
Stokes, Bessie
Swanson, Charles A.
Szubizyuski, Norbert
Tatarsky, Solomon W-13
Trowbridge, C. W., W-13
Van Arsdell, Ernest P.
Vertin, Joseph David
Vivo, Jorge S.
Weber, John Peter

SPECIALS.

Bossard, S. LeRoy
Chiasson, J. P.
Chiasson, M. J.
Chiasson, Timothy
Graulau, Luis M.
Heda, Frank
Hubbard, S. M.
Jordan, Caesar
Milliken, Allan P.
Miczoll, Konstantin P.
Kleinwachter, A.

SOPHOMORE CLASS.

Apostilides, Emanuel, S-12
Asche, Walter F.
Auwers, Fred J.
Auwers, Joseph T., W-13
Arnold, Ferris Lyle
Amoros, Gabriel
Bedessen, Phillip M.
Baker, Andrew P.
Bennewitz, Anthony H.
Blake, George James, W-13
Brust, Edward F.
Bucher, Clarence S., W-13
Burke, J. W., W-13
Brown, Otto R.
Carstens, Ernest H.
Chiasson, P. N.
Conn, Hugh I.
Del Valle, Manuel L.
Donasier, John J.
Donovan, Michael J.
Dornbusch, Franklin H.
Dubinsky, Thomas J.
Duffy, Mark M.
Dow, Julian
Dougherty, Xenophy Best
Dittmore, Joseph A.
Elmer, Raymond F.
Fahrner, Arthur H.
Ferguson, Janet E., W-13
Fisher, Thomas G.
Fleischman, Joseph A.
Feser, Raymond Leonard
Garrison, Herbert
Gunderson, Elmer A.
Hehir, Joseph
Haworth, Dale T., W-13
Hendrickson, Carl J., S-12
Holden, Alvin A.
Horn, Clint
Harris, Elijah G., W-13
Huber, Gale W.
Jenks, Isaac C.
Johnson, Joseph A.
Jackson, Edward, W-13
Kell, Chance
Kelly, Martin J.
Kietzer, Edmund E.
Koch, Oswin F.
Konle, Ralph A.
Knochel, Joseph M.
Kreml, Otto A.
Krisher, B. Franklin
Lippitt, Samuel H.
Lownick, Felix, W-13
Livingston, Clare Allen
Lindsey, Joseph H., W-13
Malloy, Francis F.
Mauricau, Van Buren
Miller, Joseph W.
Montford, Roy Malloy

Moses, Joseph, W-13
McChensy, D. H.
McQuaid, Arthur F.
Nauen, Charles O.
Nowicki, A. H.
Norris, Clarence O.
Oldfield, Raleigh E.
Oakes, Fred
Painter, John B.
Pearce, Franklin B.
Remington, Sheppard
Rice, Carroll W.
Rios, Ramon A.
Robertson, Ira B.
Ross, Joseph Clegg
Rey, H. K.
Robinson, Victor
Schaffner, N. C.
Schwartz, F. J.
Schuettler, Arthur F.
Sharp, Ara D.
Somers, Peter Arthur
Swanson, Harry F.
Sondell, Louis Carl, W-13
Schaffer, David N., W-13
Walsh, Thomas F.
Wolin, Benjamin M.
Wawrzynski, W. J.
Weber, Joseph C.
Walters, J. E., W-13
Worrell, Joel D.
Zak, Joseph J.
Zaremba, John Edward

SPECIALS.

Borchert, Herman F.
Carnall, Thomas C.
Gentry, Benjamin M.
Gonzales, Jose R.

JUNIOR CLASS.

Anguish, Eber, W-13
Barnes, John Nelson
Beltz, Andrew H.
Blomgren, Walter L.
Brieter, Martin H., W-13
Brown, James B., W-13
Byles, William J.
Bronfeld, Nathan
Bolden, Thomas Vincent
Cohen, Morris J.
Crow, Harry L.
Crescioni, D. A.
Carmichael, James F.
Conn, Earl G.
Clarke, John H.
Coleman, Charles E.
Curry, Arthur B.
Crowe, Vernon E.
Dahl, Elmer O.
Davis, Alfred T.
Defendini, Santos
Downing, Earl F.
Duffy, Frank F.
Dovre, Conrad M.
Eckwall, H. J.
Egan, T. Martin
Edmonson, June L.
Foulkes, William
Fisher, Mandel
Forbes, James F.
Foster, Robert L.
Frauer, Edgar A.
Friedman, Edward W.
Fudema, John J.
Fromm, August M.
Gieger, John W.
Gray, Edmund C.
Gray, Alfred N.
Glickson, Simon
Goldberg, Maurice J., W-13
Hartman, Minor Leroy
Harvey, Harold
Hirsch, Abraham
Honan, William Patrick
Houser, Harvey C.
Johnson, John P.
Johnson, Frank R.
Jones, Thomas Clarke
Jordan, Herbert L.
Klein, Samuel
Kelso, Robert D.
Hogan, Leo G.
Liebau, John
Leslie, James Frederick
Loewy, Joseph
Long, John W.

Livingston, Phillip, W-13
Massey, H. A.
Maguire, Franklin Thomas
Major, Wilfred A.
Marmor, Sam
Marzano, Vitantonia
Marzano, Vincenzo
Meads, Ezra L., W-13
Melnikoff, Louis R.
Merrill, Lewellen C., B. S., W-13
Miller, Fred McKay
McCleary, Edgar John
Monaco, Attillo
Moore, Harris C., W-13
Musselwhite, Brooks J.
McDonnell, Charles L.
McKenzie, Colin
Newman, Leon
Nolan, Eugene
Newman, Jefferson C., W-13
Patterson, Robert B.
Pechous, Bohumil E.
Peters, Roy E.
Phillips, William Edgar
Peterson, Peter G.
Pomeroy, Paul G.
Roan, Bert
Rongetti, Amante
Rose, William Henry, S-12
Reams, Amy E., W-13
Rathbun, Clarence A., W-13
Schallmo, Joseph, W-13
Stokke, A. M., W-13
Seigal, Morris, W-13
Sherman, Harry Harper
Skallerup, Walter M.
Stokes, Albert J., W-13
Skinsness, Casper C.
Thomas, George B.
Thornton, John W.
Urkov, Joe
Utley, R. E.
Victorine, Edward M.
Wolf, Benzoin
Walsh, J. J.
Walters, W. J.

SPECIAL.

Loyola, Jose A.

SENIOR CLASS.

Atherton, Mary Jean McL.
Ahner, Charles Louis
Abbs, Clarence Elbert
Beaudette, Joseph Wilbur
Bendick, John J.
Bridges, Benjamin L.
Bryson, Edmond Jones
Burns, John Robert
Caron, Adolph R.
Carlsen, Haldor
Carneal, Thomas E.
Christianson, Albert W.
Christianson, Henry
Collins, Samuel
Corman, Verne Martin
Cross, Clara B. Glines
Czarchouski, John
Davis, Arthur Lee
Devereux, Richard Leo
Ellis, Charles Lewis
Fulliam, Edmon B.
Freund, Emanuel Martin, W-13
Furlott, Francis Percival, W-13
Farina, Joseph
Freeman, Horatio P.
Gross, John William
Gehl, William Henry
Gates, George Francis
Gillespie, Orville F.
Gaines, Mark Cyrus
Hundertmark, Albert Herman
Hearn, Harry E.
Hutchinson, Roy Matthew
Hardeman, George W.
Hill, Harry Alonzo Keller
Hook, M. D., C. A.
Hooper, Clara A.
Hertel, Paul
Johnson, Andrew Ross
Johnson, Fred Ambrose, W-13
Juhl, Erik, B. S.
Kersten, Marie
Keller, Vincent F.
Kail, John W.
Kopecky, Louis A.
Legris, Louis J. A.

Lichner, Samuel
Lynch, Charles F.
McCarter, Alvin J.
Mulcahy, Mary Agnes
Middleton, Emanuel
Metheny, Earl S.
McElroy, James M.
Magill, Ansel Oswald, B. S.
Magill, Samuel Rufus
McKeller, Malcolm
Mann, Sidney L.
Murray, Uriah N.
Neumeyer, William H.
Nicolai, Paul
Niewig, George A.
Northcross, Daisy L.
O'Hearn, Maurice C.
Pisani, Vito Vettor
Proulx, Theophile
Potter, Ralph Edgar
Parsonnet, Aaron
Phillips, Fred Monroe
Rawitz, Samuel B.
Reed, Russell S.
Rodaway, Roy Thomas
Rennie, Thomas W.
Rispin, Edward B.
Rabbins, Maurice J.
Sample, William Rano
Simrell, Harry Alex
Sloan, Edward I.
Salzberg, Benjamin A., W13
Skleba, Leonard F.
Stoycheff, Alexander D.
Schott, Otto Julius
Tietze, Herman C.
Vachout, Marie A.
Wieczorek, Ladislaus P.
Wehrle, Louis Gilbert, B. S.
Wallin, Thomas G., B. S.
Weinberg, Harold N.

SPECIALS.

Boyd, Horace Milton
Day, Walter A.
McAvoy, William T.
Donnelly, Orlando A. R.
Voss, Fritz

LOYOLA UNIVERSITY

1076 West Twelfth Street

Chicago, Ill.

1260 STUDENTS **127 PROFESSORS**

LAW DEPARTMENT—Has quarters in the Ashland Block. The Dean is William Dillon, LL. D. Candidates for this course apply to A. D. McMahon, A. M., LL. B., Secretary, Ashland Block. Hours of instruction 6:30 to 9:00 evenings.

MEDICAL DEPARTMENT—Bennett Medical College, 1358-1362 Fulton Street. Founded 1868. Every facility in the way of complete equipment and competent faculty. J. D. Robertson, M. D., President; Maximillian Herzog, M. D., Dean.

ENGINEERING DEPARTMENT—Opened September, 1911; high school diploma required for admission. The new engineering building possesses all the best features of the latest engineering schools. Address Hayes Avenue and Sheridan Road.

PHARMACY DEPARTMENT—In point of teaching and equipment has taken its place among the recognized institutions of the country. Address Hayes Avenue and Sheridan Road.

COLLEGE OF ARTS AND SCIENCES—St. Ignatius College, 1076 W. 12th Street. Gives thorough instruction in Philosophy, Higher Mathematics, the Natural Sciences, Ancient and Modern Languages, Literature, History, etc.

THE HIGH SCHOOLS—St. Ignatius High School, 1076 W. 12th Street, and Loyola Academy, Hayes Avenue and Sheridan Road, admit pupils who have finished eighth grade and take them through the usual high school studies

ATHLETICS.

Foot-Ball, 1913-1914.

Coach—Dr. W. J. Schneider.

Captain—August M. Fromm.

The Loyola foot-ball team was organized in 1910 and succeeded in two years in developing into a team which has already created a favorable impression in athletics.

The practice work and at-home games will begin October 1, 1913, on the Loyola University campus, Devon Avenue and Sheridan Road.

Base-Ball.

Manager—B. E. Pechous.

The Loyola base-ball team begins activities in April and closes the season early in June. Fourteen games were played in the spring of 1913, with the leading college teams of Chicago. The games are played on the home grounds, Devon Avenue and Sheridan Road.

Athletic Fee.

Students from all departments join the Athletic Association sustained by Loyola University. The Annual dues are $2.00. Membership tickets are issued which admits the holder to all functions given by the Athletic Association during school year, as well as free admission to all games played on the home grounds. Athletics is an interesting part of student life, and the membership fee helps to sustain a loyal, enthusiastic and winning team. New students desiring to qualify for 1913-1914 team should make application to O. T. Owen, Business Manager, 1358-1362 Fulton Street, Chicago.

LOYOLA
UNIVERSITY
PRESS

LOYOLA UNIVERSITY

DEPARTMENT OF LAW
601 Ashland Block, Clark and Randolph Streets
Address: The Dean or Secretary
Phone Central 1671

DEPARTMENT OF LOGIC
PHILOSOPHY AND SOCIAL SCIENCE
601 Ashland Block
Address: Rev. Frederic Siedenberg, S.J.
Loyola University
Loyola Avenue and Sheridan Road
Phone Rogers Park 620

1913-1914

LOYOLA UNIVERSITY PRESS
CHICAGO

Faculty of the Law Department

Rev. JOHN L. MATHERY, S. J.,
PRESIDENT OF THE UNIVERSITY.

Rev. HENRY S. SPALDING, S. J.,
REGENT AND DIRECTOR OF GRADUATE SCHOOLS.

Hon. WILLIAM DILLON, LL. D.,
DEAN OF THE LAW FACULTY,
The Law of Corporations—Conflict of Laws.

ARNOLD D. McMAHON, A.M., LL. B.,
SECRETARY OF THE LAW FACULTY,
The Law of Wills and Administration—Practice and Procedure.

Michael J. Ahern, A. M., LL. B.,
The Law of Suretyship—Partnership.

Bernard J. Baumer, A. B., LL. B.,
The Law of Real Property—Abstracts and Conveyancing.

Francis E. Croarkin, LL. B.,
Equity Practice in State and Federal Courts.

J. Ambrose Gearon, A. B., LL. B.,
The Law of Private Corporations.

Hon. Michael F. Girten, LL. B.,
The Law of Persons and Domestic Relations.

Joseph A. Graber, A. M., LL. B.,
The Law of Personal Property.

James Hartnett, Esq.,
Constitutional and Elementary Law.

Hon. Thomas B. Lantry, LL. B.,
Judge of Practice Court.

HON. JOHN P. McGOORTY, LL. B.,
The Law of Torts.

WILLIAM C. McKENNA, A. M., LL. B.,
The Law of Agency.

GEORGE V. McINTYRE, LL. B.,
The Law of Evidence—Equity Jurisprudence.

THOMAS D. NASH, A. M., LL. B.,
The Law of Bailments.

PATRICK H. O'DONNELL, LL. D.,
The Law of Negotiable Instruments—Common Law Pleading.

EDWARD C. PURKHISER, LL. B.,
The Law of Crimes and Criminal Procedure.

REV. FREDERIC SIEDENBERG, S. J.,
Logic and Sociology.

JOSEPH J. THOMPSON, LL. B.,
The Law of Insurance—Sales.

PAYTON J. TUOHY, A. M., LL. B.,
The Law of Contracts.

ELIJAH N. ZOLINE, A. B., LL. B.,
Lecturer on Equity, Jurisprudence and Practice.

FOUNDATION.

The Law Department of Loyola University was established in September, 1908. From the beginning its success has been pronounced, and it now stands among the leading night law schools of the country. It occupies a commodious and quiet suite in the Ashland Block, Clark and Randolph Streets, in the center of Chicago's business district. The regular session for the year 1913-1914 will open on September 16th, 1913, at 6:30 p. m.

ADVANTAGES.

The class sessions of the Department are held in the evening from 6:30 to 9:00 o'clock, thus making it possible for young men employed in law offices to unite the advantages of a regular, scientific course in the law under experienced instructors with the practical training afforded by their daily work. This arrangement also enables those engaged in clerical and commercial positions to give their attention to their duties and at the same time prepare themselves for the practice of the profession.

The location of the Department in Chicago, the commercial and financial center of the West, presents opportunities which are unequaled elsewhere to those who must support themselves whilst pursuing their legal studies. The officers of the Department make every effort to aid its students to secure desirable employment when seasonable application for such assistance is made. Many requests for clerks are received from the leading law firms of Chicago, and the Secretary is frequently able to place students desiring such positions.

Chicago also affords innumerable advantages for the study of law in all its branches: Varied and important litigation is here being constantly carried on. Sessions of the Courts of Cook County, the Municipal Court of Chicago, and the Federal Courts are held daily thus affording to those who have leisure to attend ample opportunity of learning the trial methods of the leading lawyers at the Bar of Illinois. The library facilities of Chicago, open to students in the professions, are unsurpassed, and in addition, the Department has a library suitable for study and research at the disposal of its students.

The Department enjoys, moreover, the distinction of being the only evening law school in Chicago maintained and supported by a University. Members of the learned profession, through their official associations, are continually pointing out the desirability of having professional schools placed under the control of literary institutions, but until the establishment of the Law Department, by Loyola University, there existed in Chicago no evening law school under such auspices. Worthy young men, whose circumstances do not permit them to give the entire day to the study of law, may here secure their professional training and receive their law degrees from a University of recognized standing.

Students in the Law Department are admitted to the musical and literary societies, to the gymnasium and athletic clubs of the University, and to the columns of its Journal on the same basis as students in the other Departments. Thus there is fostered among the law students a spirit productive of pride in their work, and an incentive is given to better and more sustained effort. This bond of intellectual fellowship will present ideals of high achievement utterly absent in an unaffiliated law school.

AIM—METHOD OF INSTRUCTION.

The aim of the Department is to give its students a thorough training, both theoretical and practical, in all branches of the law. The course of studies is so arranged as to impart that knowledge of the law which is indispensable to students in whatever jurisdiction they may intend to practice.

The fact that the class sessions are held in the evening has enabled the Department to secure the teaching services of the leading practitioners of the Chicago Bar. Hence, the law faculty is not committed to the exclusive use of any particular system of legal instruction; the professors have been chosen because of success in their special field, and it is not deemed wise to restrict them to any particular method of imparting the knowledge they have acquired from their study and experience. All of the professors have, however, adopted a system of instruction based on the principles of the **Ratio Studiorum.** Matter, whether text or adjudicated cases, assigned for home study is first gone over in lecture by the professor, who explains what is obscure or difficult

and illustrates by practical example the principles involved.

The student then studies the assigned matter and at the next class session is prepared for the recitation, which is an exhaustive quiz, sometimes by way of question and answer and often by the oral solution of hypothetical problems involving the principles explained and studied. The student, under this system, has ample opportunity of learning thoroughly the law on each topic: First, from the **praelectio,** or explanation of the professor; secondly, from his own careful home study; and, lastly, from the recitation or class discussion.

REQUIREMENTS FOR ADMISSION.

Regular Students.—Applicants for admission to the Department must be not less than eighteen years of age, and must present proof of the successful completion of a four year high school course in a school of recognized standing. Graduates or students of private institutions with credits equivalent to those of high school graduates, will be admitted as regular students on proof of such credits.

At the time of matriculation, students must present proof of their preliminary education either by way of diploma or certificate, from the principal or director of the school from which they come. In no case will a student be admitted to the department who has not successfully pursued a four year high school course, or work equivalent thereto.

Advanced Standing.—Students who have successfully prosecuted a portion of their law course in a law school with equivalent courses and requirements may be admitted to the second or third year classes of the Department upon proof of such prior study. In such cases the certificate of the Dean, or other officer, will be deemed the best evidence.

FEES AND EXPENSES.

Matriculation.—In all cases a matriculation of Five Dollars is charged when a student is first registered. The fee is paid but once and is not returnable.

Tuition.—The tuition fee for regular students is Seventy-Five Dollars, payable quarterly in advance. A discount of Five Dollars will be allowed to students who pay the year's tuition in advance before October 1st.

Graduation.—Upon graduation of students a diploma fee of Ten Dollars will be charged.

Those desiring to take only certain courses will make arrangements with the Secretary of the Department, charges in such cases will be based on hours of classroom work.

DEGREES.

Upon successful completion of the entire regular course, as outlined, students are entitled to receive the degree of Bachelor of Laws, but before the degree is conferred each student is required to pass satisfactory written examination embracing the whole field of the law. In preparation for this examination a review course is given in the third year class, one evening each week for the entire year. The papers in this general examination are marked by the Executive Board of the Department.

Under no circumstances will a degree in law be conferred upon a student who has not completed one entire year of work in the Department.

THE DEGREE OF BACHELOR OF LAWS WAS CONFERRED UPON THE FOLLOWING STUDENTS ON JUNE 20th, 1913

William J. Anderson
Augustine J. Bowe, A. M.
Sarsfield Collins, A. B.
John W. Cudihy, A. B.
William H. Dillon, Jr., A. B.
Joseph F. Dillman
Lee Daniels
William J. Flaherty
James J. Gaughan, A. M.
James J. Grogan
Erwin J. Hasten, A. B.
Thomas J. Howe
William B. Keefe
Joseph A. Kowalski
Lawrence M. Kevin
Alfred O. Lambeau, A. B.
Emmett Moynihan
William J. McGah
Phillip H. McGrath, A. B.
Joseph D. McNulty, A. M.
Harry Smitz
Stanley M. Vesely
Lawrence J. Walsh, A. M.
Elmer J. Whitty

CLASS SESSIONS—COURSE OF STUDIES.

The regular course covers a period of three years, divided into a First, Second and Third year.

Class sessions are held on Monday, Tuesday, Wednesday and Thursday evenings from 6:30 to 9:00. Regular and punctual attendance on the part of the students and also daily preparation for class recitations are prerequisites, and delinquency in either particular will be deemed sufficient cause for cancellation of the delinquent's registration.

The quarterly system has been chosen as best adapted to the requirements of an evening law school. Each course, upon its completion, is made the subject of a searching written examination. This promotes more careful study and admits of thorough examination with less tax upon the student's endurance than a general test at the close of each year. An average of 70 per cent must be attained upon the written examination in each subject for students to continue with their classes. Those who fail to attain 70 per cent in any topic may, in the discretion of their professor, be given a second examination, but no student who fails to attain such average in two topics will be allowed such re-examination.

The following schedule shows the required law courses arranged according to years:

FIRST YEAR.

I—*Constitutional and Fundamental Law.*—5 hours per week for 12 Weeks.—Texts—Constitutions of the United States and of Illinois; Robinson's Elementary Law. Professor—JAMES HARTNETT.

II—*The Law of Contracts.*—5 hours per week for 14 weeks.—Text—Instructor's Syllabus.—Huffcut and Woodruff's Cases.
Professor—PAYTON J. TUOHY.

III—*The Law of Torts*—5 hours per week for 12 weeks.—Text—Burdick on Torts; Selected Cases. Professor—HON. JOHN P. MCGOORTY.

IV—*The Law of Crimes and Criminal Procedure*—5 hours per week for 10 weeks.—Text—May on Criminal Law; The Criminal Code of Illinois.
Professor—EDWARD G. PURKHISER.

V—*The Law of Principal and Agent*—2½ hours per week for 15 weeks.—Text—Huffcut on Agency; Selected Cases.
Professor—WILLIAM C. MCKENNA.

VI—*The Law of Property—Things Personal.*—2½ hours per week for 8 weeks.—Text—Smith on Personal Property.
Professor—JOSEPH A. GRABER.

VII—*Sales of Personalty*—2½hours per week for 7 weeks.—Text—Benjamin's Principles of Sales. Professor—JOSEPH J. THOMPSON.

VIII—*The Law of Bailments and Carriers.*—2½ hours per week for 15 weeks.—Text—Browne on Bailments; Selected Cases.
Professor—THOMAS D. NASH.

IX—*The Law of Persons and Domestic Relations.*—2½ hours per week for 16 weeks.—Text—Long on Domestic Relations.
Professor—MICHAEL F. GIRTEN.

SECOND YEAR.

X—*The Law of Property—Things Real.*—2½ hours per week for 28 weeks.—Text—Tiedeman on Real Property.
Professor—BERNARD J. BAUMER.

XI—*Abstracts and Conveyancing.*—Lecture and Practice Course.—Text—For reference, Warvelle on Abstracts; Prepared Abstracts.
Professor—BERNARD J. BAUMER.

XII—*The Law of Evidence.*—2½ hours per week for 23 weeks.—Text—Hughes on Evidence. Professor—GEORGE V. MCINTYRE.

XIII—*Pleading at Common Law.*—2½ hours per week for 24 weeks.—Text—Shipman's Common Law Pleading.
Professor—PATRICK H. O'DONNELL.

XIV—*Equity Jurisprudence.*—2½ hours per week for 29 weeks.—Text—Bispham on Equity. Professor—GEORGE V. MCINTYRE.

XV—*Wills and the Administration of Decedents' Estates.*—2½ hours per week for 16 weeks.—Text—Rood on Wills; Illinois Statutes.
Professor—ARNOLD D. MCMAHON.

XVI—*The Law of Partnership.*—2½ hours per week for 8 weeks.—Text—Mechem's Elements of Partnership.
Professor—MICHAEL J. AHERN.

XVII—*The Law of Guaranty and Suretyship.*—2½ hours per week for 12 weeks.—Text—Stearns on Suretyship.
Professor—MICHAEL J. AHERN.

XVIII—*The Law of Negotiable Instruments.*—2½ hours per week for 8 weeks.—Text—Bunker on Negotiable Instruments.
Professor—PATRICK H. O'DONNELL.

XIX—*The Law of Damages.*—2½ hours per week for 10 weeks.—Text—Sedgwick on Damages. Professor—ARNOLD D. MCMAHON.

Practice Course in connection with Third Year Course XXX—approximately 25 hours.

THIRD YEAR.

XX—*Practice and Procedure.*—Approximately 40 hours.—Text.—Instructor's Syllabus; for reference, Thompson on Trials.
Professor—ARNOLD D. MCMAHON.

XXI—*Equity Pleading and Practice.*—2½ hours per week for 15 weeks.—Text—Fletcher on Equity Pleading.
Professor—FRANCIS E. CROARKIN.

XXII—*The Law of Insurance.*—2½ hours per week for 10 weeks.—Text—Vance on Insurance. Professor—JOSEPH J. THOMPSON.

XXIII—*The Law of Private Corporations.*—2½ hours per week for 26 weeks.—Text—Marshall on Corporations.
Professor—J. AMBROSE GEARON.

XXIV—*The Law of Public Corporations.*—2½ hours per week for 12 weeks.—Text—Instructor's Syllabus; for reference. Dillon's Municipal Corporations. Professor—WILLIAM DILLON.

XXV—*Constitutional Law.*—2½ hours per week for 20 weeks.—Text—Instructor's Syllabus; Cooley's Principles; Selected Cases.
Professor—JAMES HARTNETT.

XXVI—*Conflict of Laws.*—2½ hours per week for 8 weeks.—Text—Minor's Conflict of Laws. Professor—WILLIAM DILLON.

XXVII—*Legal Ethics.*—8 hours.—Lecture Course.

XXVIII—*Insolvency and Bankruptcy.*—10 hours.—Lecture Course.

XXIX—*Review Course.*—Approximately 70 hours.—Instructor's Syllabus.
Professor—ARNOLD D. MCMAHON.

XXX—*Practice Court.*—Approximately 45 hours. Assigned Cases.
Presiding Judge—HON. THOMAS B. LANTRY.

PRACTICE COURT.

The work of the Practice Court has been an especially successful feature of the Law Department. It is in charge of the Hon. Thomas B. Lantry, formerly Judge of the Municipal Court of Chicago, and its rules of procedure are based on the rules in force in the Circuit Court of Cook County. Statements of actual cases are assigned to the students who are required to institute, prosecute and defend the proper proceedings at law or in equity as the case may be. Occasionally, also, work is assigned in matters of a purely criminal nature. Whilst the members of the Third year class are naturally required to take the leading part in the exercise of the Court, opportunity is afforded all other students, as their progress in the law warrants, to take advantage of the training afforded by the course. At the end of each trial, the presiding judge comments on and criticizes the methods of the students, explaining all points of difficulty presented by the proceedings.

Each student is required before graduation to remove a case from the Practice Court to an Appellate Tribunal; preparing the record, abstract, and briefs substantially as required by the rules of practice in the Appellate Court of Illinois. Three instructors of the Department are selected yearly to take charge of this branch of the Practice work.

Special lectures on subjects of legal importance are delivered from time to time by Judges of the various courts and others of eminent standing in the profession.

COURSE OF LOGIC, PHILOSOPHY AND SOCIOLOGY.

This class was organized in October, 1902. It is conducted in connection with the Law Department, meeting Friday evenings from 6:30 to 9 p. m., from September to May, in the Ashland Block.

Its object is to furnish to college graduates, advanced and special students and professional gentlemen, an opportunity to review their philosophy or to make a more thorough and practical study of its fundamental questions, after some experience in practical life will have made them realize their importance. Other

gentlemen, though not college graduates nor law students, are admitted to the class if their tastes and previous attainments qualify them to profit by it.

The class exercises consist of lectures and discussions on the chief points of Logic, Psychology, Ethics and Sociology. The subject matter of the past year embraced three courses, Logic, Epistemology and Sociology.

Those who have already attained the degree of A. B. will be eligible to that of A. M., on the conditions of the requisite attendance, the presentation of a paper on a philosophical subject and an examination satisfactory to the Board of Managers of the University.

No Text-book is assigned, but instead a syllabus of the lecture is distributed each evening and a list of standard reference books is supplied.

Students of the Law Department are admitted without additional fee; others are charged a fee of ten dollars, payable in advance for the whole course.

Professor: Rev. Frederic Siedenberg, S. J.

The following are outlines of the course:

I.—Formal Logic.

1. Definition. General idea of reasoning. Logic, natural and scientific.
2. Elements of Logic.
   (a) Material Elements. Acts of the mind: ideas, judgments, reasoning; their nature, kinds, properties and external expression.
   (b) Formal Element. Inference from a combination of judgments; its requisites, external expression. Principles and laws of reasoning. Forms of Argumentation.
3. Kinds of Reasoning.
   (a) Deductive. The Syllogism, demonstrative, probable, sophistic. Fallacies.
   (b) Inductive. Its nature, requisites, use and abuse.
4. How to Build an Argument. Invention, definition, division.
5. Method analytic, synthetic. Science.

II.—Material Logic.

1. Truth, its nature, kinds.

2. Logical truth; its attainment; states of the mind with regard to truth.

3. Certitude, its nature, kinds.

4. Skepticism. Kinds: Universal, Methodical Doubt, Agnosticism, Materialism, Positivism, Idealism (Christian Science), Rationalism, Traditionalism.

5. Means of attaining truth: Our cognoscitive faculties; senses, external and internal; intellect. Authority.

6. Criteria of truth: proximate, ultimate.

Sociology.

1. Sociology is the science of society with a view to its betterment.

2. Society is a collection of men conspiring to a common end by common means.

3. Its Elements:

A. Man.

1. His origin and place in the universe.

2. His nature.

(a) His physical nature.

1. His body, its faculties.

2. His soul, its nature and faculties.

3. Their union.

(b) His moral nature.

1. Principles of morality.

2. Rights and duties.

(c) His social nature.

B. Origin of society. Materialistic evolution.

C. End of Society.

D. Authority, its origin, nature. Destructive theory of Rousseau. Anarchy.

4. Kinds of Society. Primary; the family, state and church. Secondary Societies.

A. The Family.

1. Marriage, of divine institution; hence in its essentials, independent of civil authority.

2. Properties: Unity and Indissolubility; hence divorce impossible by human authority.

B. Civil Society.
1. Origin in general from God. Its form determined by some human fact.
2. The family, its unit.
3. Its proximate and ultimate end.
4. Civil authority in the abstract from God; hence the absurdity of the Social Contract of Rousseau; in the concrete determined by some human fact.
5. Forms of civil society. Stability. Liberty, true and false.
6. Tyranny. Usurpation. Transmission of civil authority.
7. Constitution, natural and written.
8. Minor societies. Right to existence and self government. Secret societies. Relation to primary societies.
9. Functions of the supreme authority; legislative, judicial, executive; taxation, militia, capital punishment.
10. Social Order:
    (a) Material order. Political Economy.
    (b) Moral order. Religion. Union of State and Church. Liberty of Conscience. Toleration; dogmatic, personal, civil. Liberty of speech and of the press. Education. Common Schools.
11. Civilization.

C. International Society.
1. International Law. Sources.
2. War.
3. Intervention.

D. Religious Society. The Church.
1. Origin. End.
2. Nature. Rights.
3. Relation to Civil Society.
4. Supreme Authority. Independent of the State. Investiture. Secular Arm. Veto of Secular Rulers in the Election of the Pope.

Register of Students

FIRST YEAR.

BAHM, STANLEY.....Hyde Park H. S.
BEAUVAIS, AUGUSTE V., A. B.....Loyola University.
BOWE, WILLIAM J.....St. Ignatius Academy.
CASHIN, J. A.....De LaSalle Institute.
DONAHOE, LEO L., A. B.....Loyola University.
DONIGAN, JAMES K.....St. Ignatius College.
DOUGHERTY, P. J., M. E.....West Chester, Pa., Normal.
DUNLAVY, E. J.....St. Ignatius College.
DWAN, JOHN A.....St. Ignatius Commercial Academy.
ELWARD, J. F., A. B.....Loyola University.
FLEMING, PETER E.....St. Gabriel's H. S.
FOLEY, E. I.....St. Ignatius Academy.
GINNANE, THOMAS J.....St. Patrick's Commercial Academy
GRAHAM, ROBERT E.....St. Ignatius College.
GREEN, NORMAN.....Englewood H. S.
HANLEY, LAWRENCE.....East St. Louis H. S.
HARKINS, LEO.....St. Ignatius Academy.
HAYES, JOHN J., A. B.....Loyola University.
HOLDEN, SYLVESTER E.....St. Ignatius College.
HUGHES, EDWARD J.....John Marshall H. S.
HERMAN, H. F.....Western State Normal, Kans.
LEAHY, MAURICE F.....Christian Bros. College, Ireland.
LEMMER, JOHN R., A. B.....Loyola University.
LYNCH, ROBERT D.....De LaSalle Institute.
MALLOY, JOHN C.....St. Ignatius College.
MEISTER, EDWIN F.....University of Illinois.
MULEADY, FRANK P.....St. Mary's College, Kans.
MCCANN, JAMES R. S.....Christian Bros. College, Ireland.
MCCLINTOCK, HAROLD W. E.....St. Ignatius Academy.
MCNAMARA, JOS. P.....St. Ignatius Commercial Academy.
MCTAGGART, THOMAS.....Arcola H. S.
MCTAGGART, WILLIAM C.....Arcola H. S.
MCSHANE, JAMES E.....Cathedral College.
QUETSCH, LEONARD J.....Special Student.
REEVE, J. FRED, A. B.....Loyola University.

RYAN, LEO A., A. B.....Loyola University.
RYAN, THOMAS M.....St. Francis College.
RYLANDS, JOSEPH L., A. B.....St. Ignatius College.
SCHAF, AUGUSTINE L.....St. Ignatius Academy.
SULLIVAN, EUGENE T.....St. Patrick's Commercial Academy.
SULLIVAN, GEORGE D.....St. James H. S.
TRAINOR, EMMETT.....St. Viator's College.
TUCKER, HARRY J.....St. Ignatius Academy.
TWOMEY, J. EDWARD, A. B.....Loyola University.
ULRICH, ALONZO E.....St. Ignatius Academy.
UNREIN, ANTHONY.....Western State Normal, Kans.
WADE, WALTER A.....St. Ignatius Academy.
WALL, JOSEPH A.....South Division H. S.
WARD, MARTIN M.....De LaSalle Institute.

SECOND YEAR.

BOSSER, ALFRED C.....Appleton H. S., Wis.
BROPHY, JAMES G.....St. Ignatius Academy.
BRUNDAGE, HOWARD A.....St. Ignatius College.
COLGAN, DANIEL J.....St. Ignatius Academy.
COLLINS, THOMAS D.....University H. S.
CORCORAN, VINCENT A., A. B.....Georgetown University.
DEVER, DANIEL W.....St. Ignatius Academy.
DONAHOE, HENRY D.....University of Notre Dame.
DOUGHERTY, RAYMOND A., A. B.....De Paul University.
FITZMAURICE, GEORGE.....St. James H. S.
FOCHTMAN, WILBERT.....St. Joseph's College.
FOSTER, JOHN.....Calumet H. S.
GARDINER, CHARLES A.....St. Ignatius Academy.
GLEASON, JAMES M.....Lewis Institute.
GORMAN, JOHN J.....St. Ignatius College.
HEALY, WALTER C.....Georgetown University.
HAYES, AMBROSE M., A. B.....Gonzaga College, Wash.
LEONARD, J. WILLIAM.....St. Ignatius Commercial Academy.
MAGINNIS, T. J., A. B.....St. Mary's College, Kans.
MAGUIRE, EDWARD A.....De LaSalle Institute.
MCGRATH, T. B.....St. Ignatius Academy.
NOONAN, JOHN A.....St. Ignatius Academy.
O'CONNELL, GEORGE V., A. B.....St. Ignatius College.
O'CONNOR, JOHN F., A. B.....Marquette University.
O'HARA, EDWARD J.....Christian Bros. College.
PERKINSON, WILL J.....Crane Technical H. S.

PHILLIPS, JESSE.....Walnut Hills H. S., Cincinnati.
REEDY, THOMAS J., A. M.....Creighton University, Neb.
WALSH, J. JOSEPH.....St. Mary's College, Kans.
YORKOWSKI, EDWARD T.....St. Ignatius Academy.

THIRD YEAR.

ANDERSON, WILLIAM J.....St. Ignatius Commercial Academy.
BOWE, AUGUSTINE J., A. M.....St. Ignatius College.
BRENNAN, EDWARD M., Ph. B.....Holy Cross College, Mass.
COLLINS, SARSFIELD, A. B.....St. Ignatius College.
CUDIHY, JOHN W., A. B.....St. Ignatius College.
DILLON, WILLIAM H., JR., A. B.....De Paul University.
DANIELS, LEE.....St. Ignatius Commercial Academy.
DILLMAN, JOSEPH F.....John Marshall H. S.
FLAHERTY, WILLIAM J.....Lake H. S.
GAUGHAN, JAMES J., A. M.....St. Ignatius College.
GLEASON, JAMES P.....St. Ignatius Academy.
GROGAN, JAMES J.....De LaSalle Institute.
GRENAGER, EMIL.....Minneapolis H. S., Minn.
HASTEN, ERWIN J., A. B.....St. Ignatius College.
HOWE, THOMAS J.....St. Ignatius Academy.
KEEFE, WILLIAM B.....St. Mary's College, Mo.
KOWALSKI, JOSEPH A.....Northwest Division H. S.
KEVIN, LAWRENCE M.....University of Notre Dame.
LAMBEAU, ALFRED O., A. B.....St. Ignatius College.
MOYNIHAN, EMMETT.....University of Notre Dame.
MCGAH, WILLIAM J.....St. Ignatius College.
MCGRATH, PHILIP H., A. B.....Jas. Millikin University.
MCNULTY, JOSEPH D., A. B.....Georgetown University.
ROBINSON, JOHN LOUIS.....Special Student.
SMITZ, HARRY.....Wendell Phillips H. S.
SORTORE, EARL H.....Kalamazoo College, Mich.
VESELY, STANLEY M.....St. Procopius College.
WALSH, LAWRENCE J., A. M.....St. Ignatius College.
WHITTY, ELMER J.....South Division H. S.

LOYOLA UNIVERSITY

Department *of* Engineering

Bulletin

1913-1914

Address: The Registrar or the Dean
Loyola Avenue and Sheridan Road, Chicago, Illinois
Telephone Rogers Park 620

OFFICERS AND FACULTY

JOHN L. MATHERY, S. J., President of the University.

HENRY S. SPALDING, S. J., Regent.

ADOLPH ANTON NEFF, B. S., M. E., Dean.

PAUL BREEN, S. J., Treasurer.

W. M. CONWAY, B. S., C. E., Professor of Civil Engineering.

ADOLPH ANTON NEFF, B. S., M. E., Professor of Mechanical Engineering.

JAMES GUERIN, A. B., B. S., Assistant Professor of Drawing.

JOHN K. MOORE, A. M., Lecturer on Construction.

MICHAEL JOSEPH MILMOE, M. E., Lecturer on Machine Design.

PAUL V. HYLAND, Lecturer on Architecture and Building Construction.

LOUIS J. PUHL, S. J., Professor of Chemistry.

THOMAS A. KELLY, S. J., Professor of Mathematics.

FREDERIC SIEDENBURG, S. J., Professor of Economics and English.

PHILIP FROEBES, S. J., Professor of German.

WILLIAM H. CAHILL, A. M., C. E., Civil Engineering.

ERNEST MCCULLOUGH, C. E., Consulting Engineer, Chicago, Ill.

ARNOLD D. MCMAHON, A. M., L.L. B., Secretary and Professor, Loyola University Law School.

WILLIAM STETSON MERRILL, A. M., Chief Cataloger, Newberry Library, Chicago, Ill.

G. LEO PLEINS, Consulting Sanitary Engineer, Chicago, Ill.

CALENDAR

First Semester, 1913-14.

1913.

Sept. 27 .....Entrance and conditional examinations.
Sept. 29 .....Registration days.
Sept. 30 .....Instruction begun.
Oct. 12 .....Columbus Day. (Holiday.)
Nov. 28 .....Thanksgiving recess begun.
Dec. 23 .....Christmas vacation begins.

1914.

Jan. 3 .....Instruction resumed.
Jan. 28-30 .....Final examinations of First Semester.

Second Semester, 1913-14.

Jan. 31 .....Registration day.
Feb. 3 .....Instruction begun.
Feb. 22 .....Washington's Birthday. (Holiday.)
May 28 .....Final examinations begun.
May 30 .....Memorial Day. (Holiday.)
June 2-28 .....Field work in Surveying.
June 21 .....Commencement.

First Semester, 1914-15.

1914.

Sept. 24 .....Entrance and conditional examinations.
Sept. 28 .....Registration days.
Sept. 29 .....Instruction begun.
Oct. 12 .....Columbus Day. (Holiday.)
Nov. 26 .....Thanksgiving recess begun.
Dec. 23 .....Christmas vacation begins.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to the College of Engineering must be at least sixteen years of age, must present satisfactory testimonial of good moral character, and must be qualified in fifteen units of entrance subjects as enumerated below.

NOTE.—A unit represents the equivalent of five prepared recitations a week for one scholastic year in a single subject.

The prescribed units are:

English	3 units
History	1 unit
Elementary Algebra	1 unit
Advanced Algebra	½ unit
Plane Geometry	1 unit
Solid Geometry	½ unit
Elementary Physics	1 unit
Total	8 units

Electives sufficient to make up the required fifteen units may be offered from the following list:

Latin	2 to 4 units
Greek	1 to 3 units
German	2 to 3 units
French	2 to 3 units
English	1 to 2 units
History	1 to 2 units
Higher Algebra	½ unit
Plane Trigonometry	½ unit
Elementary Chemistry	1 unit
Biological Science	1 to 2 units
Manual Training	2 units

Admission may be secured in one of the following ways:

1. BY EXAMINATION.—Entrance examinations will be held at the university in June and September. See Calendar.

2. BY CERTIFICATE.—Graduates from standard high schools or other approved preparatory schools will be admitted on presentation of official certificates exhibiting the number of merits to which the applicant is entitled in each subject of the preparatory course pursued.

3. From Other Colleges.—Students from other institutions, whose entrance requirements and courses are substantially equivalent to those of Loyola University, will, upon presenting proper certificates of good standing and honorable dismissal, be admitted to advanced standing without examination and be given credit for the work done in such institutions.

4. As Special Students.—Persons over 19 years of age, not candidates for degrees, will be admitted as special students, provided they give evidence of preparation for the subjects desired. Such students may become candidates for degrees by passing the examinations prescribed for entrance.

FEES AND EXPENSES.

Matriculation fee	$ 5.00
Tuition	100.00
Diploma fee	10.00
Engineering laboratories, per credit, per semester	2.50
Physical and chemical laboratories, per credit, per semester	2.50
Surveying, field work, per semester	3.00
Summer course in surveying, 2 weeks	12.50
Summer course in surveying, 4 weeks	25.00
Breakage deposit (Chemistry)	10.00

The matriculation fee is paid only once. The tuition fee is payable in two installments: $50.00 on October 1st and $50.00 on February 1st; ten days of grace are allowed. At the end of that time non-payment debars from classes.

No rebate is allowed on tuition paid, but when a student is forced, for valid reasons, to withdraw from college, the balance of the tuition representing that part of the semester for which he is absent may be redeemed in any other department studies within one year from date of withdrawal from the college.

Any balance remaining at the end of each year from the deposit required to defray the expense of breakage in the chemical laboratories will be refunded or credited for the succeeding year at the option of the student.

The college provides no dormitory system for students. Board and rooms may be obtained in the vicinity of the college at reasonable rates.

Further information may be obtained from the Registrar or the Dean of the College of Engineering.

THE COURSES OF STUDY

The outlines of the courses which follow, and the formulation of their requirements, rest on the well founded theory that successful endeavor in any field of engineering activity depends primarily on thorough theoretical and practical training in the fundamental sciences on which modern engineering practice is based. To give such training as may lead to future usefulness on the part of its students, and to develop in them the power to attack and solve new engineering and scientific problems, is the purpose of the instruction offered in the College of Engineering. The work, therefore, in all the courses outlined, is mostly prescribed, and, because of the correlation and interdependence of the professions for which training is provided, a large proportion of the studies—modified in form and extent to meet the general requirements of the individual courses—are taken in common by all students.

Contemporary engineering practice has assumed many phases of specialization within the rather comprehensive fields of civil, mechanical, electrical, and chemical engineering in the general acceptation of the terms. No one may hope to become expert in more than a very few of the various lines classified under one or another of these broad divisions. Though specialized practice is the order of the day, it is very generally recognized that extreme latitude in the election of special technical studies, in connection with the courses offered, is not conducive to sound engineering education, and tends to defeat the real purpose of engineering training. There are therefore included as elective only a comparatively small number of such special technical subjects as are admittedly valuable in affording desirable general scientific training and promoting immediate average efficiency along broad lines of professional activity.

Note: Courses in Sanitary and Architectural Engineering are in preparation.

Considerable importance is attached to English, German, French, Logic, and Economics, which are included as prescribed studies and designed to accord with the other work of the courses. The requirement in English will not be considered satisfied by the completion of the work of the first year. Instruction will be resumed and continued for as long a period as may seem necessary in the case of any student who shows subsequent inability to express himself clearly, accurately, and effectively.

Frequent visits of inspection, according to prearranged schedule under the guidance of instructors, will be made to convenient manufacturing and industrial establishments, power plants, public works, the sites of important pieces of construction, and other points affording opportunities for stimulating the student's interest and increasing his knowledge. Such visits, besides familiarizing him in a general way with the significance of productive and constructive engineering and lending themselves to his acquirement of exact habits of observation, will afford a basis for written work in which rhetorical and technical instruction may be advantageously combined.

In line with the foregoing, the work in all the courses is identical during the first year, and there is little divergence during the second year. The student is thus afforded an opportunity for self-adjustment, and the danger of premature choice of profession, which is a factor to be reckoned with, is decreased; but he will have become habituated to the scientific methods of thought and procedure so important in the prosecution of his further studies. In the third year the differentiation between the courses is more specific, and in connection with the comparatively advanced and more highly specialized work of the fourth year there is permitted the election of one of a number of groups of studies bearing on some specialty closely related to the course hitherto pursued. All such elections presuppose thorough qualifying preparation, and are subject to the approval of the Dean. The major emphasis, however, is laid on the prescribed studies in all the courses, not only as contributory and essential to professional success, but as desirable elements in culture and in life.

OUTLINE OF COURSES

FRESHMEN YEAR—COMMON TO ALL COURSES.

	First Semester.	Second Semester.
English	3	3
Logic	2	0
German or French	4	4
Chemistry	3	3
Drawing and Descriptive Geometry	3	3
Advanced Algebra	3	0
Trigonometry	3	0
Analytical Geometry	0	5
Elementary Surveying	0	3
	21	21

Surveying ..... 2 weeks
Shop work ..... 8 weeks

CIVIL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Drawing	3	2
Geology	3	0
Economics	2	0
Advanced Surveying	0	4
Technical Mechanics	0	5
	21	21

Topographic Surveying ..... 4 weeks
Shop or field work ..... 6 weeks

JUNIOR YEAR.

Mechanics of Materials	5	0
Hydraulics	0	5
Materials Laboratory	2	2
Hydraulic Laboratory	0	1
Descriptive Astronomy	3	0
Geodesy	0	3
Roofs and Bridges	5	4
Railway Engineering	4	4
Roads and Pavements	2	0
Economics	0	2
	21	21

Railway Surveying (optional) ..... 4 weeks
Shop, field, or office work ..... 5 or 10 weeks

SENIOR YEAR.

	First Semester.	Second Semester.
Bridge Design	3	0
Water Supply	3	0
Sewerage	3	0
Heat-Power Machinery	3	0
Electrical Machinery	0	3
Mechanical and Electrical Laboratory	1	1
Reinforced Concrete	0	5
Masonry and Foundations	0	2
Engineering Problems	0	2
Economics	3	0
Contracts and Specifications	0	3
Elective	5	5
	21	21

MECHANICAL AND ELECTRICAL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Machine Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	6
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

JUNIOR YEAR.

Mechanics of Materials	5	0
Hydraulics	0	5
Materials Laboratory	2	1
Hydraulic Laboratory	0	1
Physical Laboratory	2	2
Heat-Power Engineering	3	3
Mechanical Laboratory	1	1
Electrical Machinery	3	3
Machine Design	5	3
Economics	0	2
	21	21

Shop work.....10 weeks

SENIOR YEAR. (MECHANICAL.)

	First Semester.	Second Semester.
Power Plant Design	3	3
Steam Machinery Design	3	0
Gas Machinery Design	0	3
Designing and Drawing	3	3
Mechanical Laboratory	3	3
Electrical Laboratory	3	0
Economics	3	0
Contracts and Specifications	0	3
Elective	3	6
	21	21

SENIOR YEAR. (ELECTRICAL.)

Power Plant Design	3	3
Electrical Engineering	6	6
Mechanical Laboratory	3	0
Electrical Laboratory	3	3
Economics	3	0
Contracts and Specifications	0	3
Elective	3	6
	21	21

CHEMICAL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Qualitative and Quantitative Chemistry	3	3
Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	3
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

JUNIOR YEAR.

Mechanics of Materials	3	0
Hydraulics	0	3
Materials Laboratory	2	1
Hydraulic Laboratory	0	1
Physical Laboratory	2	2

Quantitative Analysis	5	0
Organic Chemistry	5	5
Heat-Power Engineering	3	3
Mechanical Laboratory	1	1
Gas and Oil Analysis	0	3
Economics	0	2
	21	21

Shop or Laboratory Work.....10 weeks

SENIOR YEAR.

Industrial Chemistry	5	5
Physical Chemistry	2	2
Electro-Chemistry	2	2
Electrical Machinery	3	3
Economics	3	0
Contracts and Specifications	0	3
Elective	6	6
	21	21

DESCRIPTION OF COURSES

ENGLISH.

The object of the instruction is to enable the student to express himself clearly, concisely, accurately, and vigorously, special stress being laid on those parts of rhetoric which will be of greatest value to engineering students. The written exercises are designed to accord with the other work of the courses. Students are instructed in the use of the library collections.

1. A course in rhetorical theory and practice, with essays based on the lives of distinguished scientists and visits of inspection.
Freshman; 1st semester; 3 credits.

2. A continuation of course 1, with essays based on assigned technical readings and visits of inspection.
Freshman; 2nd semester; 3 credits.

3. A conditional course supplementing the work of 1 and 2, and consisting wholly of theme work and consultation.
Required only of students who show inability to write clear and correct English. It will be continued until a satisfactory degree of proficiency is attained.

FRENCH AND GERMAN.

All students are required to take one year of work in either French or German. Elementary and advanced courses will be offered in each and the student may elect either. For outlines and descriptions of these courses see Bulletin of the College of Arts and Sciences.

MATHEMATICS.

1. Advanced Algebra.—A brief review of the foundations with graphic representation and of the theory and use of logarithms, followed by a treatment of permutations and combinations, theory of limits, series, undetermined coefficients, determinants, theory of equations, complex numbers.
Freshman; 1st semester; 3 credits.

2. Trigonometry.—The trigonometric functions and their relations; proofs of the principal formulas of plane trigonometry; proofs of formulas and solution of all cases of right and oblique plane triangles; computation of areas.

Proofs of principal formulas of spherical trigonometry; formulas and solutions for right and oblique spherical triangles.
Freshman; 1st semester; 3 credits.
Numerous dependent problems and applications.

3. Analytic Geometry.—Graphic representation; the straight line; conic sections; higher plane curves; the essentials of Solid Analytic Geometry. Considerable problem work is required.

Freshman; 2nd semester; 5 credits.

4. Differential and Integral Calculus.—The direct and inverse operations are carried on in parallel. The fundamental formulas and methods of differentiating and integrating are followed by a geometric treatment of maxima and minima; applications to curves, surfaces, and volumes are considered. Taylor's Theorem and the subject of series in general will be treated in the second semester, together with the applications of the calculus to the engineering sciences. Some attention will be given to the subjects of Hyperbolic and Elliptic functions. Considerable problem work is exacted.

Sophomore; 1st semester, 5 credits; 2nd semester, 3 credits.

5. Differential Equations.—The purpose of the course, which is supplementary to course 4, is to familiarize the student with the types of equations ordinarily encountered in the study of the engineering sciences, and to indicate the principles and methods employed in their solution. The solution of numerous problems will be made a leading feature of this course.

Sophomore; 2nd semester, on completion of course 4; 2 credits.

ASTRONOMY.

1. Descriptive Astronomy.—A study of the fundamental facts and principles of the subject, with observatory practice.

Junior; 1st semester; 3 credits.

GEOLOGY.

1. General Geology.—A presentation of the general principles of geology and their practical applications. The course will be arranged with special reference to the needs of engineering students. Occasional excursions will replace laboratory practice. Three lectures and one laboratory period per week.

Sophomore; 1st semester; 3 credits.

ECONOMICS.

1. Elements of Economics.—A general survey of economic theory and a discussion of present-day economic problems including wages, rent, interest, currency, banking, taxation, tariff, trusts, trades-unionism, socialism. Lectures and classroom discussions.

Sophomore; 2nd semester; 2 credits.

2. Organization and Management.—A study of American industries and a discussion of the methods of organizing, financing, and managing modern commercial institutions. The purpose of the course is to acquaint the student with the application of the general principles of economics to business life. Lectures, discussions, and field work.

Junior; 1st semester; 3 credits.

PHILOSOPHY.

1. Logic.—Formal logic or dialectics; definition, material and formal elements, kinds of reasoning, how to build an argument, analytic and synthetic methods. Material logic: truth, its nature and kinds, certitude, skepticism, cognoscitive faculties, authority, etc.

Freshman; 1st semester; 2 credits.

2. Psychology and Ethics.—Nature and properties of the human soul, cognoscitive faculties, intellect, will, liberty. General ethics, human action, morality, form of human action, divine and human laws. Applied ethics, rights and duties, right of property, socialism, society, law, etc.

PHYSICS.

1. General Physics.—A general course in the subjects of Mechanics and Heat; Light and Sound; Electricity and Magnetism. The methods of the calculus are employed to a considerable degree. Two lecture-demonstrations, two recitations, and two laboratory periods per week.

Sophomore; throughout the year; 5 credits per semester.

2. Physical Measurements.—A laboratory course, supplemented by twelve lectures on the theory and methods of precise thermal and electrical measurements, involving quantitative work in the use of various instruments of precision, and the determination of physical constants. A report of specified form is required on each experiment.

Junior; throughout the year; 2 credits per semester.

3. Practical Photography.—The principles and processes of dry plate photography, including lectures on photographic optics and laboratory work in the exposure and development of dry plates; printing processes, copying, enlarging, and the making of lantern slides.

Elective; second semester; 2 credits.

DRAWING AND DESCRIPTIVE GEOMETRY.

Note.—The freshman work in drawing and descriptive geometry is given as a combined course, but, in the cases of special students or of those admitted to advanced standing, separate courses may be given as follows:

1. Elements of Drawing.—Freehand lettering; sketching and dimensioning; geometrical construction; orthographic projection and isometric drawing; working drawings, including conventions, standards, etc.; tracing and reproductive processes. Notes and lectures on drafting room methods.

Freshmen; 1st semester; 3 credits.

2. Descriptive Geometry.—The descriptive geometry of points, lines, planes, surfaces, and solids. Tangencies, intersections, and developments. Shades and shadows and the principles of linear perspective. One lecture or recitation and two drafting periods a week.

Freshmen; 2nd semester; 3 credits.

MECHANICS AND HYDRAULICS.

1. Technical Mechanics.—The principles of Statics, Kinematics, and Kinetics, with technical applications. Analytic and graphic methods are used concurrently in the solution of problems.

Sophomore; 2nd semester; 5 credits.

2. Mechanics of Materials.—A study of the more important materials of construction, their manufacture, properties, and structural uses, and the theory of resistance to stress and deformation with applications to engineering design. Lectures and recitations.

Junior; 1st semester; 5 credits.

2a. Mechanics of Materials.—A briefer course than 2; arranged to meet the requirements in Chemical Engineering.

Junior; 1st semester; 3 credits.

3. Advanced Mechanics.—An advanced course supplementary to 2, and devoted to the treatment of such special topics as dynamical stability, the mathematical theory of elasticity, internal work and its derivatives, the theorem of least work, linear arches and curved beams. Lectures, problems, and applications.

Senior elective; 1st semester; 3 credits.

4. Materials Laboratory.—The laboratory practice will be adapted to the requirements of the individual courses and will include the various standard tests of the more important materials of construction. The work will be supplemented by lectures on the technique of testing, collateral reading, and reports carefully prepared according to a prescribed form.

Junior; throughout the year; 2 credits per semester.

4a. Materials Laboratory.—An advanced laboratory course, in continuation of the work of 4, devoted to testing and special investigations of materials of construction. Hours and nature of experimental work to be assigned in conference with the instructors concerned.

Senior elective; 1 to 3 credits per semester.

5. Hydraulics.—The theory of fluid pressure and equilibrium; the flow of water through orifices, weirs, tubes, pipes and channels, the theory of hydraulic measurements; hydraulic motors and machinery; naval hydromechanics. Lectures and recitations.

Junior; 2nd semester; 5 credits.

5a. A briefer course than 5, adapted to meet the requirement in Chemical Engineering.

Junior; 2nd semester; 3 credits.

6. Hydraulic Laboratory.—An experimental course to accompany 5, including logarithmic plotting, experiments with weirs, orifices, pipes, meters and nozzles; the testing of hydraulic machinery.

Junior; 2nd semester; 1 credit.

6a. Hydraulic Laboratory.—An advanced course in experimental hydraulics, including capacity and efficiency tests of hydraulic machinery. The hours of work will be by appointment, and some latitude will be allowed as to the nature of the experimentation.

Senior elective; either semester; 1 to 3 credits.

CIVIL ENGINEERING.

1. Elementary Surveying.—Lectures, recitations, field and office work covering the principles, uses, and adjustments of the engineer's level and transit, and the uses of the steel tape; topographic surveying with transit and stadia.

Freshmen; 2nd semester; 3 credits.

2. Advanced Surveying.—The application of the fundamental operations to city, land, mine, and hydrographic surveying; the use of the plane table and sextant; precise leveling and triangulation; including the measurement of base lines and angles; the determination of azimuth by solar observation. Lectures, recitations, field and office work.

Sophomore; 2nd semester; 4 credits.

3. Geodesy.—The principles of practical astronomy and their application in the determination of latitude, longitude, time, and azimuth with the engineer's transit and sextant. Methods of conducting geodetic surveys, and the application of the method of least squares to the adjustment of observations. The figure of the earth.

Junior; 2nd semester; 3 credits.

4. Summer Surveying.—The Summer courses in surveying are given at the close of the school year in June and are of a practical nature. The student will spend ten hours a day in the field or office in the performance of the various duties incident to the work of the surveyor. The courses in Elementary and Topographic Surveying are prescribed. The course in Railway Surveying and Location is optional. The periods allotted to these

courses are two weeks for Elementary Surveying, and four weeks each for Topographic and Railway Surveying.

5. Topographic Drawing.—The conventional methods of representing topography and the platting of the results of surveys.
Sophomore; 2nd semester; 2 credits.

6. Construction Drawing.—Stereotomy, dams, piers, arches, trestles, culverts, etc. Applications of Descriptive Geometry to engineering construction.
Sophomore; 1st semester; 3 credits.

7. Railway Engineering.—Lectures, recitations, field, and office work dealing with the subjects of railway location and construction. The theory of simple, compound, and transition curves, cross-overs, frogs and switches, turnouts, etc. Cross sectioning, the computation of cut, fill and haul; road bed construction, including ballast, track, culverts, trestles, etc. Estimates and costs.

The economics of location embracing a treatment of such topics as train resistance, the influence of grade, curvature, rise and fall; rolling stock and motive power; yards, stations, and terminals; street railways.
Junior; throughout the year; 4 credits per semester.

8. Railway Engineering.—A continuation of course 7, including a discussion of the economics of construction, a study of organization and management, maintenance of way, etc.
Senior elective; throughout the year; 2 credits per semester.

9. Railway Designs.—A conference and drawing room course in the proportioning of culverts and waterways, and the design of track layouts, yards, terminals, bridge masonry, and other railway structures.
Senior elective; 2nd semester; 3 credits.

10. Roads and Pavements.—The location, construction, and maintenance of roads, and the construction and maintenance of city streets and pavements, combined with a study of the materials used. Lectures, recitations, and collateral reading; visits of inspection and reports.
Junior; 1st semester; 2 credits.

11. Roofs and Bridges.—The analytic and graphic investigation of stresses in framed structures under various conditions of loading. Structural details. The design of a metal roof truss and of a plate girder, including general and detail drawings, bills of material, weights, and costs.
Junior; throughout the year; 1st semester; 5 credits; 2nd semester, 4 credits.

12. Bridge Design.—A continuation of course 11, involving the drafting room application of its principles to the design of simple riveted and

pin-connected truss spans, following the practice of leading bridge companies.

Senior; 1st semester; 3 credits.

13. Higher Structures.—A study of continuous, cantilever, suspension, and arch bridges; statically indeterminate structures. Lectures, computations, and drafting room work.

Senior elective; throughout the year; 3 credits per semester.

14. Steel Buildings.—The principles of construction of mill and high steel-skeleton buildings; computation of stresses and design.

Senior elective; either semester; 2 credits.

15. Reinforced Concrete.—The theory and design of beams, slabs, columns, retaining walls, dams, and other structures, and a critical study of the design and structural features of reinforced concrete arch types. The course is concluded by the complete design, including drawings, of a reinforced concrete arch.

Senior; 2nd semester; 5 credits.

16. Masonry and Foundations.—The course is given by lectures, recitations, collateral reading, and visits of inspection. Among the subjects treated are the materials of masonry; the construction of bridge piers, abutments, dams, retaining walls, etc.; ordinary, pile, and subaqueous foundations.

Senior; 2nd semester; 2 credits.

17. Water Supply.—The collection, purification, and distribution of water supplies for domestic and other purposes.

Senior; 1st semester; 3 credits.

18. Sewerage.—The collection, treatment, and disposal of sewage. Lectures, recitations, and inspection trips.

Senior; 2nd semester; 3 credits.

19. Sanitary Engineering.—A continuation of 18 and 19, the work being devoted principally to problems and designing related to water supply, sewer systems, and sewage disposal plants.

Senior elective; 2nd semester; 5 credits.

20. Hydraulic Engineering.—The application of hydraulic theory and principles to the investigation and development of water power; irrigation, river and harbor improvement; drainage and canalization. The design of hydraulic works, plants, and appliances.

Senior elective; throughout the year; 3 credits per semester.

21. Engineering Problems.—The application of fundamental principles to the investigation and solution of practical problems.

Senior; 2nd semester; 2 credits.

22. Contracts and Specifications.—The elements of business law and a survey of the law of contracts as applied to engineering work. A study of general and special clauses used in the various kinds of engineering specifications. Practice in the preparation of contracts and specifications.

Senior; 2nd semester; 3 credits.

MECHANICAL ENGINEERING.

1. Machine Drawing.—A continuation of Drawings 1 and 2, and the application of their principles to machine drawing and empirical design. Sketching and detailing machine elements from model and copy; the making and use of standard data sheets; detail assembly drawings of complete machines. The work is designed to familiarize the student with commercial drafting room practice, and is of distinctly vocational character.

Sophomore; 1st semester; 3 credits.

2. Kinematics of Machinery.—Lectures and recitations on the theory of mechanisms, instant centers, cams, gears, linkage, velocity and acceleration diagrams, etc.

Sophomore; 2nd semester; 3 credits.

3. Kinematic Drawing.—The graphic application of the principles of course 2. A series of separate problems of graded complexity will be assigned to each student.

Sophomore; 2nd semester; 3 credits.

3a. Kinematics.—A combined lecture, recitation, and drafting room course briefer than 2 and 3, and arranged to satisfy the requirement in the principles of mechanism for chemical engineering students.

Sophomore; 2nd semester; 3 credits.

4. Lectures, recitation, and drafting room exercises covering the application of the principles of Drawing, Kinematics, and Mechanics to the proportioning of machine elements and the designs of complete machines.

Junior; throughout the year: 1st semester, 5 credits; 2nd semester, 3 credits.

5. Heat-Power Engineering.—Lectures and recitations on the thermodynamics of gases and vapors as applied to heat engines; a study of fuels and the principles of combustion; boilers, engines, and auxiliaries. The indicator diagram. A detailed analysis of efficiencies and economies of various types of steam engines, gas engines, and turbines; valves and valve gears.

Junior; throughout the year; 3 credits per semester.

5a. Heat-Power Machinery.—A lecture and recitation course for civil engineering students, designed to impart a general knowledge of the structural features and operating characteristics of boilers and producers, steam

and gas engines and auxiliaries, pumping, hoisting, traction, and other machinery. The course is devoid of much technical detail.

Senior; 1st semester; 3 credits.

6. Mechanical Laboratory.—Introductory experimental work in the testing and calibration of gauges, indicators, integrating instruments, etc.; power measurements; fuel and gas analysis; oil testing; the determination of engine efficiencies and the testing of auxiliary apparatus.

Junior; throughout the year; 1 credit per semester.

6a. Mechanical Laboratory.—A continuation of course 6, the work including the testing and determination of efficiencies of steam engines, boilers, gas and oil engines, pumps, air compressors, refrigerating machinery, etc.

Senior; throughout the year; 3 credits per semester.

6b. Mechanical Laboratory.—An advanced experimental course open only to students who have completed the prescribed laboratory courses. Hours and nature of the work to be arranged.

Elective; either semester; 1 to 3 credits.

Note.—The work in experimental engineering is varied according to the courses. Each experiment will be followed by a carefully prepared report of specified form.

7. Power Plant Design.—A continuation of course 5. Lectures, recitations, and computations dealing with the types and principles of boilers; multiple expansion engines, and their auxiliaries and dependencies; gas engines; steam turbines, refrigerating machinery, and air compressors. The selection of elements and their combination in power plants.

Senior; throughout the year; 3 credits per semester.

8. Steam Machinery Design.—A study of types and proportions of steam engines; the indicator card; entropy—temperature and crank effort diagrams; the design of such details as valve gears, governors, and flywheels; the balancing of engines.

Senior; 1st semester; 3 credits.

9. Gas Machinery Design.—A study of modern gas engines and producers, and the designing of important details of internal combustion engines.

Senior; 2nd semester; 3 credits.

10. Designing and Drawing.—A drafting room course paralleling the work of 8 and 9. This course must be accompanied, or preceded by 8 and 9.

Senior; throughout the year; 3 credits per semester.

11. Steam Boilers.—A study of steam boiler types, fuels and furnaces; steam boiler computations, and the design of boiler details and accessories.

Senior elective; 1st semester; 3 credits.

12. Steam Turbines.—A general discussion of the types, principles, and economic and structural features of steam turbines; steam turbine calculations.

Senior elective; 2nd semester; 3 credits.

13. Compressed Air.—A study of the properties of air, the principles of air compressors, and the applications of compressed air.

Elective; 2nd semester; 2 credits.

14. Heating and Ventilation.—The fundamental principles of the subject, and their application to the design, construction, and installation of heating and ventilating systems.

Senior elective; 2nd semester; 2 credits.

15. Mechanical Refrigeration.—A study of the principles and methods involved in the artificial production of low temperatures, and a survey of the design, construction, and operation of refrigerating machinery and refrigerating systems.

Senior elective; 2nd semester; 2 credits.

ELECTRICAL ENGINEERING.

1. Electrical Machinery.—Lectures, recitations, and laboratory work dealing with the history of the subject, and the laws and properties of electric and magnetic circuits; electrical measurements; the theory construction and operation of direct and alternating current machinery.

Junior; throughout the year; 3 credits per semester.

1a. Electrical Machinery.—A briefer course than 1, arranged to meet the needs of civil engineering students.

Senior; 2nd semester; 3 credits.

2. Electrical Engineering.—Lectures, recitations, and computations on the theory and characteristics of electrical machinery, dealing in detail with the laws and properties of electric and magnetic circuits; direct and alternating current phenomena; transmission lines; generators, motors, transformers, converters, etc.

Senior; throughout the year; 6 credits per semester.

3. Electrical Laboratory.—Practice in the electrical laboratories will be continuous throughout the junior and senior years. The work will be of such nature as to meet the requirements of the individual courses. Opportunities for laboratory work of an advanced character will be afforded

to those who have completed the prescribed courses. The regular work will include the testing of instruments, generators, motors, transformers, converters, storage batteries, etc.; it will be supplemented by occasional lectures. A carefully prepared report on each experiment is required.

Throughout the year; junior, 1 credit per semester; senior, 3 credits per semester.

4. Telephone Engineering.—The theory and operation of telephonic apparatus and the application of the principles of electrical engineering to the design, construction, and maintenance of transmission lines, and to the investigation of problems in telephone engineering.

Senior elective; 1st semester; 3 credits.

5. Electric Railways.—The application of the principles of electrical engineering to the construction, operation, and equipment of various types of electric railway systems. The dynamics of train movement, and the plotting of speed-time curves, railway load curves, etc.; location and financing; cost of construction and operation.

Senior elective; 2nd semester; 3 credits.

6. Transmission and Distribution of Electric Energy.—A discussion of typical systems of power generation, transmission, and distribution for lighting, traction, and industrial purposes, and their design, construction, operation, and maintenance with some reference to costs and rates.

Senior elective; 2nd semester; 3 credits.

7. Design of Electrical Machinery.—The applications of fundamental principles and of considerations of commercial practice to the design of various classes of direct and alternating current machinery.

Senior elective; 2nd semester; 3 credits.

8. Illumination and Photometry.—The theory of illumination and a discussion of illuminating apparatus and devices; the design, construction, and operation of electric lighting systems and the photometry of lamps.

Senior elective; 2nd semester; 3 credits.

CHEMISTRY AND CHEMICAL ENGINEERING.

1. General Chemistry.—Entrance Chemistry, if offered, will not be accepted as the equivalent of this course.

Two lecture-demonstrations, one recitation, and one laboratory period, covering the fundamental principles of the science, the chemistry of the non-metals, and metals and the elements of qualitative chemical analysis.

Freshmen; throughout the year; 3 credits.

2. Qualitative Analysis.—The laboratory work will be varied to some extent according to the course pursued and will include analyses of alloys, rocks, minerals, slags, mattes, and other compounds or mixtures. One lecture or recitation and three laboratory periods per week.

Sophomore; 2nd semester; 3 credits.

3. Quantitative Analysis.—An introductory course consisting of one lecture and three laboratory periods per week devoted to volumetric and gravimetric determinations, including practice in the calibration of flasks and burettes, acidimetry and alkalimetry, chlorimetry, and the analysis of simple compounds and ores.

Sophomore; 2nd semester; 3 credits.

4. Quantitative Analysis.—A continuation of course 3, and of a more advanced nature. Instruction will be given gravimetric, volumetric, and electrolytic methods of analysis. The work will include the analyses of iron and steel, slags, silivates, paints, lubricants, ores, etc. One lecture, laboratory conferences and the equivalent of five laboratory periods weekly.

Junior; 1st semester; 5 credits.

5. Gas and Oil Analysis.—A laboratory course with weekly conferences, devoted to practice in the calorimetry and typical methods of analysis of gases and oils.

Junior; 2nd semester; 3 credits.

6. Water Analysis.—Lectures and laboratory practice in the examination of water with reference to its use for domestic and industrial purposes.

Elective; 1st semester; 3 credits.

7. Organic Chemistry.—Two lectures and one recitation on the general principles and theories of organic chemistry and the methods of preparation and characteristic reactions of organic compounds with a corresponding laboratory course of three periods per week. A limited amount of work along special lines or organic chemistry may be elected.

Junior; throughout the year; 5 credits.

8. Advanced Organic Chemistry.—A conference and laboratory course dealing with the preparation and reactions of special classes of organic compounds and including ultimate organic analysis. The work may be varied, in a limited degree, according to the option of the student.

Senior elective; throughout the year; 3 to 4 credits per semester.

9. Industrial Chemistry.—The course is given by means of lectures, recitations, laboratory practice, and visits of inspection, and deals with the chemical processes, apparatus, and operations involved in various chemical

industries, and with the analysis of raw materials and products. Attention is given, as far as may be, to estimates of apparatus and plants for particular purposes and to costs and management.

Senior; throughout the year; 5 credits per semester.

10. Physical Chemistry.—The course is arranged to embrace a systematic presentation, with experimental illustration, of the more important principles of theoretical chemistry, stress being laid on such points as the theory of solution, reaction velocity, catalysis, chemical equilibrium, and the applications of the principles of physical chemistry to industrial practice. The course is accompanied by laboratory work in the determination of molecular weights and physico-chemical measurements.

Senior; throughout the year; 2 credits per semester.

11. Electro-Chemistry.—Lectures, recitations, and laboratory work partly in continuation of course 11, dealing with the principles of the subject and their application to chemical industries. The laboratory practice includes electro-chemical measurements and the electrolysis of chemical compounds.

Senior; throughout the year; 2 credits per semester.

12. Microchemistry.—Lectures and laboratory work on the use of the microscope and its accessories, and the application of microscopic apparatus and methods to chemical investigation and analysis.

Senior elective; 2nd semester; 3 credits.

13. Assaying.—Lectures and laboratory work in the crushing, sampling, and assaying of gold, silver, copper, lead, and zinc ores, and the sampling and assaying of bullion.

Elective; 1st semester; 3 credits.

14. Metallurgy of Iron and Steel.—A discussion of the properties and principles of production and manufacture of iron and steel, with laboratory practice in special analytical methods applicable to iron and steel determinations. The work is supplemented by visits of inspection and reports.

Senior; 1st semester; 2 or 3 credits.

15. General Metallurgy.—A course treating of metallurgical processes and the principles of combustion and thermochemistry, pyrometry, fuels, fluxes, refractories, furnaces and artificial draft and blast.

Senior elective; 1st semester; 2 credits.

16. Metallurgical Problems.—The solution of a number of selected problems relating to the principles utilized in practical metallurgy.

Senior elective; 1st semester; 1 to 2 credits.

17. Metallurgy of Non-ferrous Metals.—A course of lectures dealing in considerable detail with the metallurgy of copper, lead, silver, gold, zinc, and aluminum, and more briefly with nickel, cobalt, arsenic, antimony, tin, mercury, bismuth, etc. The physical and chemical properties of ores and the various processes employed and principles involved in reduction and refinement are discussed.

Senior elective; 2nd semester; 3 credits.

18. Metallurgical Laboratory.—The laboratory practice is closely related to the class room exercises. It includes special analytical methods applicable to iron and steel, fuel, fluxes, and slags. Practice in pyrometry and the measurement of blast velocity, and the analysis of flue gas by special apparatus. Roasting, smelting, leaching and amalgamating processes as applied to the reduction of the ores of gold, silver, copper and lead.

Senior; 2nd semester; 3 to 5 credits.

19. Chemical Engineering.—A study of the types of apparatus and operations involved in chemical manufacture, the design of chemical plants, and the consideration of the chemical resistance of materials suitable for their construction.

Senior elective; 2nd semester; 3 to 5 credits.

EXAMINATIONS

Examinations are held semi-annually at the end of each semester. The work done during the semester, as well as the examinations, is considered in the grading of students. The results of the examinations are expressed on the basis of 100.

70 is required for passing; 60-70 indicates a condition; below 60 shows failure. Regularity of attendance at lectures and laboratory, and faithfulness in the performance of daily work are of as much weight in determining the standing of students in their classes as are the examinations.

Conditions.—Conditioned students must remove such conditions at the examinations given for that purpose during the following semester. Failing in this the student is obliged to discontinue the subject in which he is conditioned and to repeat it during the next semester.

For a special examination of this kind a fee of $1.00 is charged.

DEGREES.

The degree of Bachelor of Science in Civil Engineering, Mechanical Engineering, Electrical Engineering, and Chemical Engineering will be conferred on students who satisfactorily complete the corresponding courses.

REGISTER OF STUDENTS—1912-1913

William Bielefeldt	Freshman
George M. Briody	Freshman
Lawrence Leo Conlon	Special
Robert M. Connelly	Freshman
John P. Duhig	Sophomore
Henry Eifler	Sophomore
Irvin J. Fernekas	Freshman
Felix Firley	Freshman
Roy Goppelsroeder	Sophomore
John A. Granzow	Freshman
Francisco Fernandez Grau	Freshman
Alfred Alphonse Holland	Freshman
Herbert W. Kelly	Freshman
Cornelius W. Koebele	Sophomore
J. H. McCaughey	Freshman
Joseph J. Maucini	Sophomore
Arthur C. Meyer	Sophomore
Manuel F. Montana	Freshman
Braulio A. Munecas	Freshman
J. Alphonse Rauen	Freshman
Louis C. Rockett	Sophomore
Nicholas A. Saigh	Sophomore
Howard F. Smith	Freshman
Elmer John Spiegel	Sophomore
Frank Joseph Stevens	Freshman
John Joseph Wagner	Sophomore
William Francis Waugh	Freshman

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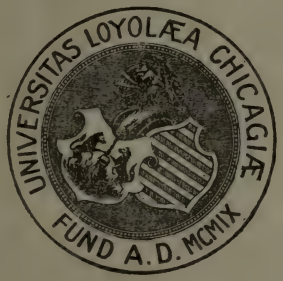

1914

CHICAGO - ILLINOIS

Loyola University

BULLETIN

1914

Chicago, Illinois

LOYOLA
UNIVERSITY
PRESS

Forty-Fourth Annual
Announcement

of

St. Ignatius College

Department *of* Arts *and* Sciences

of

Loyola University

1914

1076 West Twelfth Street
CHICAGO

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PRESIDENT.

Rev. JOHN F. NEENAN, S. J.,
VICE PRESIDENT.

Rev. GEORGE J. LEAHEY, S. J.,
CHANCELLOR AND SECRETARY.

Rev. ALBERT F. ESTERMAN, S. J.,
TREASURER.

Rev. JOHN J. MASTERSON, S. J.

Officers of the College

Rev. JOHN L. MATHERY, S. J.,
PRESIDENT.

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VICE PRESIDENT, PREFECT OF STUDIES AND DISCIPLINE.

HENRY S. SPALDING, S. J.,
Regent of Affiliated Schools.
Second Vice-President.

Rev. JOSEPH B. MURPHY, S. J.,
ASST. PREFECT OF STUDIES AND DISCIPLINE.

Rev. ALBERT F. ESTERMAN, S. J.,
TREASURER.

Rev. JOHN P. HOGAN, S. J.,
CHAPLAIN.

Rev. ARNOLD J. GARVEY, S. J.,
LIBRARIAN.

Rev. EDWARD J. CALHOUN, S. J.,
CURATOR OF MUSEUMS.

EDWARD J. KIEFFER, M. D.,
PHYSICIAN.

JOHN B. MURPHY, A. M., M. D., LL. D.,
SURGEON.

GEORGE W. MAHONEY, M. D.,
OCULIST.

College of Arts and Sciences

PROSPECTUS.

Charter.—St. Ignatius College was erected in 1869 for the higher education of the Catholic youth of Chicago and vicinity. It is conducted by Fathers of the Society of Jesus. A charter was granted to the institution by the Legislature of the State of Illinois, June 30, 1870, with power to confer the usual degree in the various faculties of a University. On November 21, 1909, the college became the Department of Arts and Sciences of Loyola University.

Legal Title.—The legal title of the College for the purposes of bequests and donations is

ST. IGNATIUS COLLEGE OF CHICAGO, ILLINOIS.

Curriculum.—The studies pursued in the College comprise the Doctrines and Evidences of the Catholic Religion, Logic, Metaphysics, Ethics, Astronomy, Physics, Chemistry, Botany, Biology, Physiology, Mathematics, Rhetoric, Composition, Elocution, History, the Latin, Greek, English, German and French Languages and Literature.

Location and Buildings.—St. Ignatius College is located at 1076 West Twelfth Street. Its central location makes it easy of access even from the remotest sections of the city. The buildings contain valuable Mineralogical and Natural History Museums, and a library of 50,000 volumes, a department of which is reserved for the students. The class-rooms are well lighted and comfortable; there is a gymnasium, provided with lockers and shower-baths, and, in general, the College has all the equipment needed for the convenience, comfort, and mental and physical development of the students. The Department of Physics has an ample lecture room, and laboratories fitted with all the up-to-date apparatus required for experimental purposes. The Department of Chemistry, in addition to its lecture room, has

eight large slate-topped tables for qualitative analysis, so arranged as to accommodate eighty students.

Classical High Schools.—The better to secure the results aimed at in its educational work, and to arrange a more perfect co-ordination between High School and Collegiate studies, the University has deemed it advisable to maintain a closely affiliated system of Classical High Schools. Their purpose is to fit their pupils to meet the College entrance requirements by offering a programme of studies based upon those fundamental principles which, in the judgment of the Faculty, underlie alike the work of the High School and the College. At present these schools number two: The St. Ignatius Academy, 1076 W. Twelfth Street, and Loyola Academy, Hayes and Sheridan Road.

GENERAL REGULATIONS.

No Boarding.—The College is intended for day scholars only. Students who live at a distance are not advised to take lodgings in the city, unless they are of a mature age and of a steady disposition.

Entrance.—Candidates for entrance are examined and placed in the class for which their previous attainments have qualified them; and they are expected to bring testimonials from the school which they have last attended.

No one is barred from matriculation on account of his religious opinions, though all are required to show a respectful demeanor during the ordinary exercises of public prayer.

Distribution of Time.—The Academic Year consists of one session, beginning the first week of September and ending in the latter part of June, when the Annual Commencement, the Conferring of Degrees and the Distributions of Premiums take place.

The College is open every morning at half-past 7 o'clock. Those who come before the time of class proceed at once to the class-rooms and spend the interval in private study. All are required to be present five minutes before half-past 8 o'clock, at which hour the Catholic students hear Mass. The regular

class exercises begin immediately after Mass and close at 3 p. m.

Thursday is the weekly recreation day.

Attendance.—As regular attendance is an important element in class-standing and an essential condition for successful work, students must not be detained or withdrawn from classes except for very grave reasons. For absence, or for permission to withdraw before the close of the daily session, a note from the parent or guardian will invariably be required. Mere absence does not excuse a student from the obligation of preparing his ordinary recitation or relieve him from any part of his examinations. Frequent absence or tardiness, except on account of sickness, is sufficient cause for dismissal. Students are required to be present eighty-five per cent of the school year to merit promotion in June.

Sickness, however, will be considered a valid excuse, provided a doctor's certificate be presented after an absence of a week or longer.

Home Study.—All the endeavors of the Faculty will fail to insure success for the students unless they apply themselves to their studies with diligence and constancy outside of class hours. Approximately twenty-five hours each week are spent in class work; and to prepare recitations and exercises for this work, as well as to review the matter previously seen, at least three hours of home study daily are required. Parents and guardians are, therefore, respectfully urged to insist on this application.

Communications.—Due notice should be given to the Vice-President of a change of residence, or of the contemplated withdrawal of a student.

Examinations and Premiums.—Written competitions are made by the students three times a year. The class-standing of the students, as well as the honors and premiums, are determined partly by these competitions and partly by the daily class-work, each counting one-half.

These competitions take place at the end of the months of November, January and March, the first two being followed by

a public distribution of premiums and the reading of the percentages obtained by the students.

The medals and prizes given on Commencement Day are awarded in accordance with the results of the quarterly competitions. These prizes are: the medal of excellence for the highest average in the class; first and second honors for a yearly percentage of 90 and 85, respectively. Markings are on the scale of 100. An average below 75 shows an unsatisfactory standing; an average below 70 is failure to pass.

Discipline.—Though the government of the Institution is mild rather than severe, yet, for the maintaining of order and discipline, without which there can be no training nor development of character, the students are required to be obedient, earnest in study, punctual, and refined of manner; any serious neglect in these essential points rendering the offender liable to effective correction and even to dismissal.

Conduct Outside the Premises.—For faults committed outside the premises, the officers of the College do not consider themselves responsible, as students cease then to be under their jurisdiction; still, in justice to the reputation of the College, the authorities will hold students strictly accountable for offenses of this nature.

Luncheon.—Dining rooms have been fitted up for the students, and placed in charge of a reliable caterer, so that students who desire a warm luncheon at the noon hour may be able to obtain it without leaving the premises.

Students are not allowed to leave the premises between the sessions without a written request from their parents or guardians to take lunch elsewhere.

EXPENSES.

Since the institution is not endowed, it is entirely dependent for support on the fees paid for tuition.

Tuition per session of ten months, for all classes, $60.

Students of General Chemistry and Physics pay $10 per session.

Students engaged in Laboratory work deposit $5 with the Treasurer at the beginning of the Course, to pay for chemicals and breakage.

Library fee of $1 for all.

Diplomas for Graduates in the Classical Course, $5.

For each conditional examination taken on the appointed day, a charge of $1 is made; if taken at another time, the charge is $2.

Payments for conditioned examinations must be made invariably before the examinations.

No extra charge is made for instruction in French, German or Vocal Culture.

The session is divided into quarters, which begin, respectively, about the 1st of September, the 15th of November, the 1st of February and the 15th of April.

Payments must be made quarterly or semi-annually in advance. No deduction is allowed for absence.

DEGREES.

According to the Act of the Legislature, under which St. Ignatius College was incorporated, its Board of Managers has power "to confer such academic degrees and honors as are conferred by colleges and universities of the United States."

DEGREES IN REGULAR COURSE.

The degree of Bachelor of Arts (A. B.) is conferred upon those who successfully complete the course outlined below.

The degree of Bachelor of Science (B. S.) is conferred upon those students who have satisfactorily completed the combined College and Medical course—six years; also on those who have completed the four years' College Course, with the exception of either Latin or Greek or both, in place of which studies one modern language for two years and a group of subjects from the Natural Sciences and Mathematics, assigned by the Dean of the College.

For the degree of Bachelor of Literature (Litt. B.) or Bachelor of Philosophy (Ph. B.) four years of college work are required. The candidate must do special work in English, in one modern language, and in philosophy. He must pass all examinations, written and oral, with due credit, and submit a thesis.

The degree of Master of Arts (M. A.) or Master of Science (M. S.) can be obtained by one year of graduate study in residence. Examinations and a written thesis are required for these degrees.

No degrees will be given to those who have not satisfied their obligations to the institution.

Honorary degrees are conferred at the discretion of the Board of Trustees upon those who have distinguished themselves in literature, science, or the professions.

COMBINED COURSE.

Announcement.—In the College Course proper, an outline of which is given below, the prescribed studies for Junior Year are English, Logic, Metaphysics, Psychology and Evidences of Christianity—a total of fourteen hours; the prescribed studies for Senior Year are English, Ethics, Theodicy and Evidences of Christianity—a total of eleven hours. Students who desire an A. B. or a B. S. degree must devote eight hours a week to elective studies in the Junior Year and eleven hours a week in the Senior Year. With the approval of the Vice-President of the College, the elective branches may be taken from the studies mentioned in the "Outline of the College Course." But candidates for the combined course of A. B. or B. S., that is, those who intend to take up Law or Medicine, in combination with a College Course, may elect, during their Junior and Senior Years at College, equivalent work to be done in the School of Medicine or Law. At the end of their Senior College Year they will receive their A. B. or B. S. degree, due credit being given them in the School of Medicine and Law, for the work they have accomplished there during their Junior and Senior Years at College.

SCHOLARSHIPS.

Friends of education who wish to donate scholarships can found one in perpetuity by giving the sum of Fifteen Hundred Dollars. Sixty Dollars will provide an annual scholarship.

The following are now held by the College:

PERPETUAL.

The Miss Eliza McConville Scholarship.
Memorial Scholarship: Margaret Gertrude Onahan.
Damen Council, 650, Knights of Columbus, Scholarship.
The Hon. William J. Onahan Scholarship.
The Hon. Charles A. Mair Scholarship.
The Hon. Thomas Brenan Scholarship.
Memorial Scholarship: Mrs. Mary White Riordan.
The Henry Venn, A. B., Class of 1906, Scholarship.
Memorial Scholarship: Mr. and Mrs. Pancratius Metz.
The Mr. and Mrs. Michael J. Riordan Scholarship.

ANNUAL.

The De Soto Council, Knights of Columbus, Scholarship.
The Rev. Henry J. Dumbach, S. J., Scholarship: Mr. Andrew Maguire.
The Illinois Council, Knights of Columbus, Scholarship.

SPECIAL PRIZES.

Intercollegiate English Prize.—A purse of $100.00 ($50.00 for the first prize, $20.00 for the second, $15.00 for the third, $10.00 for the fourth, and $5.00 for the fifth) is offered yearly by Mr. D. F. Bremner, of Chicago, for excellence in English essay writing. The purse is open to the competition of the Jesuit Colleges of the Missouri Province, which are:

St. Louis University, St. Louis, Mo.
St. Xavier College, Cincinnati, Ohio.
St. Ignatius College, Chicago, Ill.
St. Mary's College, St. Marys, Kan.
Creighton University, Omaha, Neb.
Detroit College, Detroit, Mich.
Marquette University, Milwaukee, Wis.

St. John's College, Belize, British Honduras.
St. Ignatius College, Cleveland, Ohio.
St. John's University, Toledo, Ohio.
Sacred Heart College, Prairie du Chien, Wis.

Intercollegiate Latin Prize.—For the best Latin essay from competitors of the same colleges, a gold medal is offered by Very Rev. Father Provincial.

The Alumni Medal.—A gold medal for the Highest Honors of the Senior Class is offered by the Alumni Association of Loyola University.

The John Naghten Debate Medal.—Mr. John Naghten has offered a gold medal to be awarded to that member of the Loyola Oratorical Association who shall deliver the best speech in the annual Public Debate of the Society.

The Harrison Oratorical Medal.—A gold medal is offered by Hon. Carter H. Harrison, LL. D., for the best oration delivered in the Oratorical Contest, which is open to the students of the Senior, Junior, Sophomore and Freshman Classes.

The Dumbach Chemistry Medal.—A gold medal is offered in memory of Rev. H. J. Dumbach, S. J., by Mr. Andrew Maguire to the student who makes the best examination in Chemistry.

The Clifford Medal of Excellence.—A gold medal is offered by Hon. R. W. Clifford for the Highest Honors in the collective branches of the Junior Class.

The Murphy Medal of Excellence.—A gold medal is offered by Dr. John B. Murphy for the Highest Honors in the collective branches in the Sophomore Class.

The Gibbons Medal of Excellence.—A gold medal is offered by Hon. John Gibbons for the Highest Honors in the collective branches in the Freshman Class.

The Joseph Magee Elocution Medal.—A gold medal is offered by Mr. Joseph Magee for excellence in Elocution.

SOCIETIES.

St. Ignatius College, like other centers of learning, has always been ready to sanction and encourage such societies as tend to promote the various interests of the students. The following societies in particular are deemed worthy of special mention:

THE ALUMNI ASSOCIATION

was organized February 10, 1895. Its object is to preserve and strengthen the ties of fellow-feeling and friendship among former students of the College, and to afford them an opportunity of showing their attachment and esteem for their Alma Mater. Any graduate or student of the College, or of any Jesuit College or University, may apply for membership.

THE SODALITY

has for its object the cultivation in its members of an earnest religious spirit and a tender devotion to the Mother of God. It was established November 3, 1872. It was aggregated to the Sodality of Rome, under the title of "Our Lady Help of Christians," and under the patronage of St. Aloysius, on the 19th day of January, 1873.

THE LOYOLA ORATORICAL ASSOCIATION

was organized on the 10th of November, 1875. It affords opportunity for acquiring skill in the art of speaking, gives much useful information to its members, and develops in them a taste for literary studies. Many of the former members of this society attribute much of their success in life to the address and readiness of debate which they acquired during their term of membership. The usual exercises at the weekly meetings are the reading of original essays and the discussion of subjects of debate approved by the President.

THE GYMNASIUM AND ATHLETIC ASSOCIATION

was formed to encourage physical exercise, and to create and foster a college spirit among the students. It has a Gymnasium

which is fitted out with suitable apparatus, and in which regular instruction is given by a competent athletic instructor. The football and baseball teams do much to make college life pleasant, and the laurels they are accustomed to win on local fields are much appreciated by their fellow-students.

THE STUDENTS' LIBRARY ASSOCIATION

The Students' Library was established with the view of forming in the students a correct literary taste, and of safeguarding them against the many dangers of indiscriminate reading. Students are strongly encouraged to supplement their regular class work by a judicious course of reading under the direction of their professor. The library has a goodly number of volumes; in connection with the library is a reading room well stocked with the standard magazines of the day.

THE ORCHESTRA

The College Orchestra held its first rehearsal on October 2, 1900. Its purpose is to develop the musical talent of the students, and to encourage them to aim at proficiency in instrumental music.

THE GLEE CLUB

while giving pleasant recreation to its members, adds much to the enjoyment of College celebrations.

THE LOYOLA UNIVERSITY MAGAZINE

published quarterly by the students, is intended to foster literary efforts in the students of the present, to chronicle College doings and to serve as a means of intercommunication with the students of the past.

It was established in 1902.

Officers of Societies

LOYOLA UNIVERSITY ALUMNI ASSOCIATION

PRESIDENT
LEO J. DOYLE

VICE-PRESIDENT
PAYTON J. TUOHY

HONORARY VICE-PRESIDENTS
ANTHONY SCHAGER, '70's
EDWIN J. STUBBS, '80's
MICHAEL V. KANNALLY, '90's
CHARLES G. BYRNE, '00's
JAMES FITZGERALD, '10's

RECORDING SECRETARY
JOHN K. MOORE

CORRESPONDING SECRETARY
JAMES R. QUINN

TREASURER
M. MALACHY FOLEY

HISTORIAN
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BERNARD McDEVITT, Jr.
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FRANK J. O'BYRNE

MODERATOR
REV. WILLIAM P. LYONS, S. J.

SODALITY OF THE BLESSED VIRGIN MARY

DIRECTOR
REV. JOHN BARLOW, S. J.

First Term		Second Term
JOHN P. BURKE	PREFECT	JAMES P. MOLLOY
THOMAS C. CLENNON	FIRST ASSISTANT	JOHN G. PETERSON
WILLIAM G. DOOLEY	SECOND ASSISTANT	CLARENCE F. MURPHY
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LOYOLA ORATORICAL ASSOCIATION

REV. PATRICK A. MULLENS, S. J.
PRESIDENT
JOHN P. BURKE
VICE-PRESIDENT

First Term		Second Term
JAMES R. HANRAHAN	RECORDING SECRETARY	STANISLAUS RUDZIEWICZ
EARL D. KING	CORRESPONDING SECRETARY	LAMBERT K. HAYES
J. AARON COLNON	CENSORS	JOSEPH F. KERWIN
THOMAS C. CLENNON		JAMES P. MOLLOY

THE LOYOLA UNIVERSITY MAGAZINE

JOHN AARON COLNON, '14, EDITOR

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EDWARD E. CAVERLEY, '15
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T. J. CUNNINGHAM, '14, PHARMACY
WALTER A. WADE, '15, LAW

GENERAL ANNOUNCEMENT FOR 1914-1915.

Matriculation. In order to facilitate the examination of new students, applicants should present themselves as soon as possible after August 15. Office hours from 9 to 12 A. M.

Examination of Conditioned Students will take place on the following dates:

Tuesday, August 25.—Latin, Greek and English.

Wednesday, August 26.—History, Mathematics and Science.

Entrance Examinations will be held on Friday, August 28, and Saturday, August 29.

Fall Term.—Registration.—September 3, 4, 5. Classes begin Tuesday, September 8.

Faculty

REV. PATRICK A. MULLENS, S. J.
PHILOSOPHY

REV. JOHN E. BARLOW, S. J.
LATIN

REV. WILLIAM P. LYONS, S. J.
GREEK

REV. ARNOLD J. GARVY, S. J.
ENGLISH

REV. FREDERIC SIEDENBURG, S. J.
ENGLISH

REV. JAMES L. McGEARY, S. J.
PHYSICS
MATHEMATICS

REV. EDWARD J. CALHOUN, S. J.
CHEMISTRY
MATHEMATICS

REV. PHILIP FROEBES, S. J.
MATHEMATICS

REV. CHARLES COPPENS, S. J.
FRENCH
EVIDENCE OF RELIGION
HISTORY OF PHILOSOPHY

REV. AUGUSTINE M. EFFINGER, S. J.
POLITICAL ECONOMY
HISTORY

The College

The College Course extends through four years and embraces instruction in the departments of Philosophy, Language, Literature, History, Science, and Mathematics. The aim of the course is to give the student a complete liberal education, which will train and develop all powers of the mind, and will cultivate no one faculty to an exaggerated degree at the expense of the others. The college ideal is not to foster specialization, but to cultivate the mind, to build up and strengthen true character, and to impart that accuracy of thought and reasoning and that breadth of view which must ever be the foundation as well of more advanced scholarship as of eminence in the professions or other stations in life.

To attain this end, the studies prescribed in this course, and leading up to the degree of Bachelor of Arts, are regarded as fundamental and essential in a liberal education, and therefore are not left to the student's option. It is especially to be noted that practically all the studies in the Freshman and Sophomore years are prescribed. Only in the Junior and Senior years do some of the studies become elective.

ENTRANCE REQUIREMENTS.

1. All applicants for admission to the College Department of Loyola University must give satisfactory evidence of good moral character.

2. Candidates who have satisfactorily completed the course prescribed by the Academies of Loyola University will be admitted without examination.

3. Graduates from other Academies or High Schools will be admitted without examination, if they present evidence that they have completed the work equivalent to that required by the course in the Academies of the Loyola University, as set forth in their catalogue.

4. All other applicants for admission, who wish to enter as candidates for the A. B. Degree, will be required to pass a satisfactory examination in the following subjects:

Latin.—Authors: Caesar's Gallic War, four books; Nepos' Lives (6) may be taken in place of two books of Caesar; Cicero's Orations against Catiline and for Archias; Cicero's De Senectute and Sallust's Catiline or Jurgurthine War may be taken as substitutes for three of the above orations; Virgil, four books of the Aeneid, or their equivalent from the Eclogues, Georgics, and Ovid's Metamorphoses.

Grammar and Composition.—The examination in Grammar and Composition will require a thorough knowledge of the whole Latin grammar, together with such facility in writing Latin Prose as is acquired by one who satisfactorily completes the course of exercises prescribed by the Academies of the University. This course is based on Arnold's Latin Composition, for which see catalogues of the Academies.

Greek.—Authors: Xenophon's Anabasis, four books or their equivalent; Homer's Iliad or Odyssey, one book.

Grammar and Composition.—The examination in Grammar will require a thorough knowledge of etymology, of the syntax of cases, the rules of concord and prepositions. The theme will be based on Xenophon, and will test the candidate's ability to translate into Greek simple sentences, with special reference to the use of forms, particularly of the irregular verbs and the common rules of syntax.

English.—Texts Prescribed for Reading and Study: Two plays of Shakespeare, Burke's Conciliation with the Colonies or American Taxation; Irving's Sketch Book; one essay of Macaulay; Scott's Lady of the Lake; Goldsmith's Deserted Village; Tennyson's The Passing of Arthur; Lowell's Vision of Sir Launfal; Coleridge's Ancient Mariner.

The applicant should make himself familiar with the characters, the plot, incidents and characteristic diction of each work. Equivalents will be accepted.

Rhetoric and Composition.—The applicant will be examined on the principles of rhetoric as set forth in Brooks' English Composition, Book II, or in a work of equal standing. The composition will test the candidate's ability to write clear, idiomatic English. The subject will be taken from his experience and observation, or from the books he presents for examination. The spelling and punctuation must be correct, the sentences well constructed. The writer must show some discrimination in the choice of words and ability to construct well ordered paragraphs.

Mathematics.—Algebra to Indeterminate Equations (included). Plane and Solid Geometry, Plane Trigonometry.

History.—Greek and Roman History to the Fifth Century, A. D.; History of the United States; Modern History; Migrations of Nations to Renaissance.

Civics.—J. W. Garner, Lessons in Civil Government.

5. Students who have not taken up the study of Latin or Greek in the Academy or High School are admitted to the Collegiate course leading to the Degree of Bachelor of Science. They will be required to present credits in one modern language and the natural sciences equivalent to those granted in Latin or Greek or both.

COLLEGE CLASSES.

Freshman Class.—The object of this class is the cultivation in a special manner of literary taste and style, which is to be effected chiefly by the study of the best poets and prose writers. The Greek and Latin classics are studied for this purpose, together with such English writers as are noted for the highest qualities of literary substance and form. Special emphasis is laid on the study of poetry. Moreover, in this class, as in the others of the course, the literary work is supplemented by that training in Mathematics, Science and History which is required by a liberal education.

Sophomore Class.—The work of this year centers on the study of Oratory and Historical Composition. The nature and types of Oratory, principles of argumentation, the nature and requirements of historical writing, are thoroughly investigated—the best models, ancient and modern, forming the subject-matter of study. Thus, while perfecting literary taste, the class is intended to develop that grasp and perspective of structure without which composition on a large scale is impossible.

Junior Class.—The object of this class is to form the mind to habits of correct reason and to impart sound principles of philosophy. Logic, Rational Philosophy—being, causality, the nature of matter; the human soul, its nature, origin, operation, etc.—are the chief subjects of study. The additional training received from the study of the history of Philosophy and various literary topics is by no means neglected.

Senior Class.—The study of Philosophy is continued this year in courses on the two important subjects of Natural Theology and Ethics. These courses treating of the existence of God, the origin of Moral Obligation, the Natural Law, Duties and Rights, etc., form the crowning work of a liberal education. Their aim is to teach sound principles of conduct, to give the students clear ideas on the purpose and destiny of man, and on the problems of life and their solution, as furnished by ethical principles.

DEPARTMENT OF PHILOSOPHY.

I. LOGIC.
- A. Formal Logic or Dialectics.
  1. Definition. General idea of reasoning. Logic; natural and scientific.
  2. Elements of Logic.
     - (*a*) Material Elements. Acts of the mind; ideas, judgments, reasoning; their nature, kinds, properties and external expression.
     - (*b*) Formal Element. Inference from a combination of judgments; its requisites, external expression. Principles and laws of reasoning. Forms of Argumentation.
  3. Kinds of Reasoning.
     - (*a*) Deductive. The Syllogism; demonstrative, probable, sophistic. Fallacies.

(*b*) Inductive. Its nature, requisites, use and abuse.
4. How to build an argument. Invention, definition, division.
5. Method, analytic, synthetic. Science.

B. Material Logic or Criteriology.
1. Truth, its nature, kinds.
2. Logical truth; its attainment; states of the mind with regard to truth.
3. Certitude, its nature, kinds.
4. Skepticism. Kinds: Universal, Methodical Doubt, Agnosticism, Materialism, Positivism, Idealism, Christian Science, Rationalism, Traditionalism.
5. Means of attaining truth. Our cognoscitive faculties; senses, external and internal; intellect. Authority.
6. Criteria of truth; proximate, ultimate.

II. METAPHYSICS.

A. General Metaphysics or Ontology.
1. Being. Objective Concept. Essence.
2. States of Being. Existence. Possibility, internal, external. Source of internal possibility.
3. Transcendental properties of Being: one, true, good.
4. Kinds of Being: Substance and Accident.
(*a*) Notion of Substance.
(*b*) Nature, Individual, Supposite, Person.
5. Notion of accident.
(*a*) Existence of accident separate from substance.
(*b*) Species of accidents.
(*c*) Space, place. Compenetration, Multilocation.
6. Causes of Being.
7. Perfection of Being.
(*a*) Finite, infinite.
(*b*) Contingent, necessary.
(*c*) Time, Eternity.
(*d*) Order, beauty, sublimity.

B. Special Metaphysics.
1. Cosmology.
(*a*) Origin of the World. Materialism. Pantheism. Creation. Age of the World. Atheistic and Theistic Evolution. End of Creation.
(*b*) Constitution of Bodies.
(*c*) Organic bodies. Life. Degrees and Functions. Senses. Experimental psychology.
2. Rational Psychology.
(*a*) Nature of the human soul. Union with body.
(*b*) Properties: Spiritual, immortal.
(*c*) Faculties: 1. Cognoscitive. Intellect. Acts. Origin of Ideas. 2. Appetite. Rational, the Will. Liberty.
3. Natural Theology.
(*a*) God, not Nature, nor Power behind Nature, nor World soul or

spirit, but a Personal Being distinct from the Universe. Pantheism, Atheism, Agnosticism.

(b) His existence known not immediately, nor by intuition, nor by an innate idea, but by a posterior demonstration.

(*c*) Essence of God. Self-existence. Necessary, Infinite, Eternal, Immutable, Immense.

(*d*) Attributes: Unity. Simplicity. Polytheism. Dualism. Anthropomorphism. Origin of evil, Physical and Moral.

(*e*) Knowledge of God.

(*f*) Will of God.

(*g*) Influx into creatures. Creation. Conservation. Concourse.

(*h*) Providence. Distribution of temporal good and evil.

III. ETHICS OR MORAL PHILOSOPHY.

Definition. Truths assumed from Metaphysics.

A. General Ethics.

1. Subjective and Objective ultimate end of Man.
2. Human action. Imputability. Merit. Impediments.
3. Origin of morality of human action in the abstract and in the concrete.
4. Norm of Human Action.
   (*a*) External Norm. Law, External, Natural, Positive, divine and human Obligation.
   (*b*) Internal Norm. Conscience.

B. Applied Ethics.

1. Rights and Duties. Relation to others as individuals.
   (*a*) Duties to God.
   (*b*) Duties to Self—Suicide. Danger.
   (*c*) Duties to Fellow-Men. Love. Enemies.
      1. To their Souls:
         (*a*) To their intellect. Lying. Mental Reservation.
         (*b*) To their will.
      2. To their body. Self-defense.
      3. To their honor. Dueling.
      4. To their property. Right of private property in abstract. Communism. Socialism. Single Tax. Right to private property in the concrete.
      5. Ways of acquiring property.
   (*d*) Restitution.
2. Society. Relations to others as members of society.
   (*a*) Definition of Society.
   (*b*) Origin of society in the abstract. Man social by nature. Hobbes. Rousseau. In the concrete, some human fact.
   (*c*) Kinds of society. Primary: the family, state and church. Secondary Societies.
      (*a*) The family:
         1. Marriage, of divine institution; hence, in its essentials, independent of civil authority.
         2. Properties: Unity and Indissolubility; hence divorce

impossible by human authority.

(*b*) Civil Society.

1. Origin in general from God. Its form determined by some human fact.
2. The family, its unit.
3. Its proximate and ultimate end.
4. Civil authority in the abstract from God; hence the absurdity of the Social Contract of Rousseau; in the concrete, determined by some human fact.
5. Forms of civil society. Stability, Liberty, true and false.
6. Tyranny. Usurpation. Transmission of civil authority.
7. Constitution, natural and written.
8. Minor societies. Right to existence and self-government. Secret societies. Relation to primary societies.
9. Functions of the supreme authority; legislative, judicial, executive; taxation, militia, capital punishment.
10. Social Order:
    (*a*) Material order. Political Economy.
    (*b*) Moral order. Religion. Union of State and Church. Liberty of Conscience. Toleration; dogmatic, personal, civil. Liberty of speech and of the press. Education. Common Schools.
11. Civilization.

(*c*) International Society.

1. International Law. Sources.
2. War.
3. Intervention.

(*d*) Religious Society. The Church.

1. Origin. End.
2. Nature. Rights.
3. Relation to Civil Society.
4. Supreme Authority. Independent of the State. Investiture. Secular Arm. Veto of Secular Rulers in the Election of the Pope.

The number of periods indicates the amount of time given to a subject per week. A period, unless otherwise specified, stands for fifty minutes.

LATIN.

FRESHMAN CLASS.

(Five periods of 60 minutes each.)

Precepts: A thorough review of Latin prosody and versification.

Authors—First term: Horace, Ars Poetica; Virgil, Aeneid, books 3, 5 and 6; Livy, books 1 and 21.

Second term: Livy, books 21; Horace, Select Odes.

Sight Reading: Selections from Christian Hymnology; Livy.

Practice—Both terms: Bradley's Aids to Writing Latin Prose, Part I, and selections from Part II to Exercise 60. Two themes a week. A theme in imitation of the prose authors studied about every fortnight.

Memory: From the authors read in class.

SOPHOMORE CLASS.

(Five periods of 60 minutes each.)

Authors—First term: Cicero, Pro Lege Manilia; Horace, Select Odes.

Second term: Horace, Epodes, Epistles and Satires; Tacitus, Agricola.

Sight Reading: Selections from the authors assigned above; Tacitus, Germania or Annals; Selections from the Latin Fathers.

Practice—Both Terms: Bradley's Aids, selections from Part II, from Exercise 50 to end of book. Two themes a week. One composition every fortnight in imitation of the authors studied. Off-hand translation from English into Latin.

Memory: Select passages from the authors read.

JUNIOR CLASS.

(Three Hours.)

Authors—First term: Cicero, Quaestiones Tusculanae; Plautus, Duo Captivi; History of Latin Literature, Mackail (Scribner's), for reference. Essays in Latin, Bradley's Aids.

Second term: Cicero, Quaestiones Tusculanae, continued; Pliny, Letters; Juvenal, Selections; Selections from the Latin Fathers. Essays in Latin.

GREEK.

FRESHMAN CLASS.

(Five Periods.)

Precepts—First term: The syntax of the verb repeated; general rules of quantity in connection with the author; the Homeric dialect, cf. Kaegi-Kleist, Nos. 209-215. Brief sketch of Greek Epic and Lyric poetry. Cf. Jebb's Classical Greek Poetry.

Second term: The precepts of the first term thoroughly repeated.

Authors—Both terms: Plato, Apology or Crito; Homer, Iliad, selections from books 2, 3, 4, 6.

Sight Reading—Both terms: The New Testament or selections from the authors read in class.

Practice—Both terms: A written theme once a week, based on the authors studied and illustrating the syntax of Attic Greek; or Kaegi-Kleist Exercise Book 2, Nos. 52-66.

Frequent written reviews in class.

SOPHOMORE CLASS.

(Five Periods.)

Authors—First term: Demosthenes' Philippics. Analysis of first or third Philippic to be seen in detail.

Second term: Demosthenes on the Crown, with detailed analysis. Sophocles, Antigone, Oedipus Tyrannus or Oedipus Coloneus.

Sight Reading—Both terms: The New Testament or St. Chrysostom, Eutropius, or St. Basil.

Practice—Both terms: Easy themes built on sentences in the text, once a week. Frequent written reviews.

JUNIOR CLASS.

(Three Periods.)

Authors—Both terms: Plato, Phaedo, analysis; Keep's Stories from Herodotus; Aeschylus, Prometheus Bound or Agamemnon.

ENGLISH.

FRESHMAN CLASS.

(Five Periods.)

Precepts: Literary Aesthetics; Theory of the Beautiful, of the Sublime; Taste; Imagination; Theory of Literature; Poetics; Nature and kinds of poetry; elements of poetic substance and form; characteristics of Lyric and Epic Poetry. Fiction: Constructive principles of story-writing; elements of Fiction, viz., plot, character, situation, purpose; Realism and Romanticism in Fiction; development of the English Novel.

Text-book: Coppens' Introduction, with Professor's Notes.

Texts for study: Newman's Lecture on Literature and Essay on Aristotle's Poetics; Selections from Newman, Ruskin, De Quincey, Milton, Coleridge, Wordsworth, Keats, Tennyson, DeVere.

History of English Literature and Criticism. Anglo-Saxon, Semi-Saxon, Old English and Middle English Periods; the Elizabethan Age; The Transition Period; The Classical Age.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week on subjects chiefly literary.

SOPHOMORE CLASS.

(Five Periods.)

Precepts: Oratory: Nature and types of oratory; division of the oration; style in public speaking; methods of oratorical composition; principles of argumentation.

Text-book: Coppens' Art of Oratorical Composition.

History: Principles of historical composition; ethical requirements of history; representative English and American historians.

Texts for study: Burke's speech on American Taxation and Address to the Electors of Bristol; Webster's Reply to Hayne, Girard College Case, Knapp Trial, Commemorative Address on Adams and Jefferson; Newman's Second Spring. Other speeches of Webster, Calhoun and Clay. Famous French Orators.

History of English Literature and Criticism: The Romantic School of the Nineteenth Century; American Literature.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week. Analysis and criticism of speeches.

JUNIOR CLASS.

(Four Periods.)

Precepts: The Drama; laws and technique; theory of the Tragic; of the Comic.

Texts for study: Shakespeare's Plays; interpretation, critical and comparative study.

Practice: One composition a week or every fortnight. Essays, critical and philosophical.

SENIOR CLASS.

(Four Periods.)

Precepts: Theory of expository writing; the critical and philosophical essay; stylistic and structural requirements; historical development of the English essay.

Texts for study: Essays of Macaulay, Newman, Brownson, Archbishop

Spalding, etc. Analysis and comparative study of essays, with the emphasis laid on substance and structural organization.

Practice: One composition a week or every fortnight. Subjects chiefly critical and philosophical.

MATHEMATICS.

FRESHMAN CLASS.

(Three Periods.)

First term: Algebra, c. 22, Choice, etc., to end of book.

Second term: Analytical Geometry, four chapters to Parabola excl., supplementary propositions.

SOPHOMORE CLASS.

(Three Periods.)

First term: Analytical Geometry, Parabola to end of book.

Second term: Calculus.

JUNIOR CLASS.

(Two Periods.)

Both terms: Calculus continued and finished.

Text-books: Wentworth's Complete Algebra and Analytical Geometry; Murray's Calculus.

HISTORY.

FRESHMAN CLASS.

(Three Periods.)

This course deals with the causes which led to the revolutions against religious authority in Germany under Luther and in England under Henry VIII. It treats of the social upheavals and wars which followed from the religious rebellions. It embraces the period from the suppression of the Templars to the reign of Louis XIV.

The Renaissance; the causes of the Protestant Revolution; the Exile of the Papacy; the great Schism of the West; the Hundred Years' War; the Ottoman Empire; the Inquisition, universities, guilds.

The age of Charles V; the Protestant Revolution; Catholic Revival;

wars of the Protestant Revolution; the Huguenots; Thirty Years' War.

Spain and England; Spain in the New World; the Puritans; Age of Louis XIV.

Both terms: Guggenberger, History of the Christian Era, Vol. 2.

SOPHOMORE CLASS.

(Three Periods.)

This course deals with the social and political revolutions of the eighteenth and nineteenth centuries. It gives the long struggle of the people for greater rights and liberites. It begins with the Hanoverian Succession in England and ends with a brief account of contemporary history.

The Hanoverion Succession in England; the beginning of Russia; Wars of the Austrian Succession; Colonies of North America; Seven Years' War; Division of Poland.

Causes of the political and social revolutions of the eighteenth century; American War of Independence; French Revolution; Era of Napoleon; Catholic Emancipation in England.

Europe in the first half of the nineteenth century; Crimean War; Italy; Franco-German War; Civil War in the United States; great powers today; Church and State.

Both terms: Guggenberger, History of the Christian Era, Vol. 3.

JUNIOR AND SENIOR CLASSES.

(One Period.)

Both terms: Turner's History of Philosophy.

History of Philosophy embraces the historical development and scientific correlation of philosophical systems, with such additional information, biographical and otherwise, as may be needful for the fuller understanding of the subject. One lecture is delivered weekly, the students being required to furnish written dissertations upon the matter treated.

Ancient Philosophy. The Vedas. Theories of Egypt and Asia. The Ionic School. The Pythagoreans. The Sophists. The Socratic School. The Epicureans. The Stoics. The Sceptics. The Syncretists and Roman Philosophy. Jewish-Alexandrian Philosophy. Neo-Phythagoreanism. Neo-Platonism. The Fathers of the Church. The Gnostics. The Schoolmen. The Mystics. The Revival of Platonism, of Aristotelianism. Arabian and Jewish Philosophy.

Modern Philosophy. Descartes and his followers: Malebranche, Spinoza, Bayle, Locke, Hume, the Encyclopaedists, Leibnitz, Wolf, Berkley,

Rousseau. The Scottish School. The Transcendentalists, Kant, Fichte, Hegel, Schelling, and their Schools of Thought. Positivism, Modern Evolution Theories. The Neo-Scholastics. Thomistic Philosophy.

ASTRONOMY.

SENIOR CLASS.

(Two Periods.)

Young's Astronomy—historical, descriptive and practical. Lectures and recitations. For reference, Clerk's History of Astronomy, Newcomb's "The Stars," Lockyear, Langley.

GEOLOGY.

General course in structural, dynamic and historical geology. Study of the geology of Illinois. Field work. Petrology and Mineralogy. The college possesses a collection of the more important minerals and rocks; in addition to this, the students have access to the Field museum. Lectures, recitations and written exercises. For reference, Dana and Le Conte.

PHYSIOLOGY.

A course in which the student will be taught the main facts of Physiology, together with a general survey, gross and microscopic, of the mammalian organs and the fundamental mammalian tissues. Lectures, recitations, demonstrations and laboratory work. Specially adapted for those desiring to teach elementary Physiology in academies or high schools.

POLITICAL SCIENCE.

General Principles of Law: Municipal law; civil rights, contracts, real estate, criminal law. International law; its nature and authority; War and Peace, Rights and Duties of Belligerents; Rights and Duties of Neutrals.

General Principles of Government: State Governments. Constitution. Their nature, object, establishment. Departments; legislative, executive, judicial. The National Government: Origin, nature and growth. Its Function; the legislative, the judiciary, the executive.

CHEMISTRY.

Course I. General Inorganic Chemistry.—Prerequisite High School credits in Chemistry from an accredited High School or Academy.

The laboratory work aims at familiarizing the student with thee more common elements and their compounds. Moreover, it supplies the necessary empirical basis for understanding the laws and theories of Chemistry as explained in the lectures. Again, the powers of accurate observation are stimulated, and logical deduction, based on observation, inculcated.

Course II. Qualitative Analysis.—Prerequisite, Course I or its equivalent. This course aims at giving a thorough knowledge of the analytical reactions necessary for recognizing the common metals and acid radicals.

After a review of the theory of dissociation and mass action as fundamental principles of analytical procedure, balancing of equation for oxidation and reduction and methods of analysis are discussed.

Each student is required to systematize the Group manipulation from the manipulations of the individual metals. Refined inorganic tests for metals and acid radicals are included in the course.

A number of the "unknowns" are analyzed and reported on. These returns, together with repititions and written examinations at the end of the semester, are required for full credits.

Text: Otis C. Johnson, Analytical Equation; J. Stieglitz, Qualitative Chemical Analysis, Part III.

Reference: Prescott's Johnson; J. Stieglitz, Qualitative Chemical Analysis, Parts I and II.

PHYSICS.

A continuation of the High School Course involving a more extended development of the principles of Physics, the derivation and interpretation of formulas and their application to physical problems.

(a) Mechánics and Heat.—This course corresponds to the first half of College Physics. Lectures and Laboratory, embodying the theory as well as the accurate determination of physical constants; adjustments and use of instruments of precision; verification of laws of impact, torsion, rigidity, etc., Young's Modulus, Moment of Inertia. Determination of vapor pressures and densities; freezing and boiling points; specific heats; hygrometry.

(b) Light, Sound, Electricity.—In the continuation of College Physics the same analytic method is pursued in the discussion of the theories which underlie the phenomena of these subjects, and due emphasis is placed on the important applications of waves and harmonic motion to these phenomena. The Laboratory covers the laws of refraction, diffraction, spectrum analysis, photometry, polarization; stationary waves, Lissajous' curves; electrostatic induction, capacity of condenser, measurement of resistance, operation of dynamo, motor, alternator, and transformer.

Both Semesters, Lectures and Recitations three periods a week; Laboratory, two periods a week.

Prerequisites: Plane Trigonometry, Algebra, Geometry, High School Physics.

Text: Carhart's College Physics.

EVIDENCES OF RELIGION.

FRESHMAN CLASS.

(Two Periods.)

The Church as a Means of Salvation; The Last Things; The Christian's Duties Toward God, etc., Wilmer's, pp. 379 to 493, the part from p. 399 to p. 422, excl., being omitted.

SOPHOMORE CLASS.

(Two Periods.)

Grace; The Sacraments, etc., Wilmer's, pp. 279 to 379.

JUNIOR CLASS.

(Two Periods.)

The Creation of the World; the various grades of Creation, etc., Wilmer's, pp. 200 to 279; Christianity a Revealed Religion, etc., pp. 1 to 77.

SENIOR CLASS.

(Two Periods.)

The basis of Morality; Law as the Objective Norm of Human Actions, etc., Wilmer's, pp. 399 to 421; the Constitution of the Church, etc., Wilmer's, pp. 77 to 200.

PEDAGOGY.

As there is a growing tendency on the part of the graduates to enter the teaching profession, a course in pedagogy has been opened, which prepares the graduate to teach in high schools and normal schools, and to be principal of a four years' course high school.

Course 1. The History of Education. Three hours a week, one term. Text-book: Monroe.

A Survey of Greek and Roman Education; Plato's Republic, Aristotle's Politics, and Quintilian's Education of an Orator. Education in the Middle Ages. Drane's Christian Schools and Scholars, and Montalembert's Monks of the West. The Jesuit System of Education. Hughes and Schwickerath. La Salle, Quick, Montaigne, Locke, Rousseau, Froebel, Herbart. Present national school system.

Course 2. Theory and Art of Teaching. Three hours a week, one term.

This course consists of lectures, assigned reading, informal discussion and practice. It embraces school equipment, organization and management. The student will be enabled to make a thorough study of the public

and private schools of the city, the high schools and normal schools.

Course 3. Physiological Psychology. Five hours a week, one-half term.

This is a course in applied psychology and is intended to supplement the course of rational psychology.

Definitions, Methods. Organs and their functions. Cell Tissues, Nerves, Spinal Cord, Brain. Mechanical theory of nervous action, Excitation, Inhibition and Conduction.

Correlation of Sensation and Motion. Automatic, reflex and voluntary movements. Cerebral Localization. Speech and theories of the speech center, psychological explanation of its problems.

Stimulus, Genesis of Sensation, Composition of the Sense Percept (idea) —Basis in sensation of the time and space concept. Errors in special perception, in visual perception generally; monocular and binocular vision.

Measurement of sensation intensity. Weber's, Fechner's, Merkel's Law. Time, reactions for sensation, volition, thought. Influence of attention, fatigue, rhythm.

Feeling and Emotion. Apperception, Attention, Association.

References: Wundt, Human and Animal Psychology; Grundzügeder, Physiologischen Psychologie; James, Psychology; Ladd, Outlines of Physiological Psychology; Scripture, the New Psychology; Mayer, Psychology; Tichener, Experimental Psychology; Sandford, Experimental Psychology.

SCHEDULE OF CLASS PERIODS.

	Freshman Year	Sophomore Year	Junior Year	Senior Year
Philosophy			8	5
Latin	5	5	3E	
Greek	5	5	3E	
English	5	5	4	4
History	3	3	1E	1E
Mathematics	3	3	2E	
Chemistry	5			
Physics		5	4E	
Elocution	1	1		
Religion	2	2	2	2
Electives (see below)				

1. Value of Periods: Latin, 60 minutes; Religion, 30 minutes; all other branches, 50 minutes.

2. Electives: In Freshman and Sophomore years a choice must be made between Mathematics or History. Eight hours a week in the Junior and eleven hours a week in the Senior year must be devoted to electives. These include, besides the branches marked with an "E" in the list above, the following: German, French, Political Economy, Pedagogy, Astronomy, Geology, Biology, Chemistry, Public Speaking, Descriptive Geometry, etc.

Conferring of Degrees

June, 1913

HONORIS CAUSA

LL. D.

Edward Louis Moorhead, A. M., M. D.
Maximillian Herzog, A. M., M. D.

A. M.

Thomas J. Maginnis
L. Frederick Happel
Thomas Q. Beesley
Arthur W. Kettles
Carl Johan, Baron Liljencrants
James H. O'Neill
John W. Thornton
James J. Pickett
Ralph C. Sullivan
Louis C. Rockett
Elmer J. Spiegel

A. B.

Joseph P. Elliott
Mark A. Lies
Richard O'Donnell
Francis E. Streysman
James Fitzgerald
Louis D. Moorhead
Walter E. Somers
Edward V. Walsh
George J. Zahringer

B. S.

Erik Juhl
Richard J. Kelly
Robert S. Westaby
William J. Pollock
Thomas G. Wallin
Daniel J. Paradine
Louis G. Wehrle
John A. Freudenberg

CLASS HONORS.

SENIOR CLASS.

THE ALUMNI MEDAL FOR THE HIGHEST HONORS OF THE CLASS OF 1913 WAS MERITED BY

JAMES FITZGERALD

Next in Merit.....Edward V. Walsh

JUNIOR CLASS.

THE JOHN B. MURPHY MEDAL OF EXCELLENCE WAS MERITED BY

ROBERT J. GARLAND, 91.8

FIRST HONORS.

J. Aaron Colnon, 90.6
William G. Dooley, 90

SECOND HONORS.

John P. Burke, 89.7

SOPHOMORE CLASS.

THE HON. JOHN GIBBONS MEDAL OF EXCELLENCE WAS MERITED BY

EDWARD J. AMBERG, 92

SECOND HONORS.

James J. Noonan, 87.6

FRESHMAN CLASS.

THE HON. RICHARD W. CLIFFORD MEDAL OF EXCELLENCE WAS MERITED BY

ERNEST W. THIELE, 95

FIRST HONORS.

Peter E. Nolan, 93
James P. Molloy, 91
James J. Maher, 91
John F. McNamara, 90
Stanislaus G. Rudziewicz, 90
John G. Peterson, 90

SECOND HONORS.

Leo E. McGivena, 89
Peter P. Vitmanski, 88
Clarence F. Murphy, 88

SPECIAL PRIZES.

THE DAVID R. BREMNER PURSE FOR THE BEST INTER-COLLEGIATE ENGLISH ESSAY WAS WON BY

JAMES FITZGERALD

Next in Merit.....St. Louis University

THE HON. CARTER H. HARRISON ORATORICAL MEDAL WAS WON BY

JAMES FITZGERALD

Next in Merit.....William G. Dooley

THE JOHN NAUGHTEN DEBATE MEDAL WAS WON BY

WILLIAM G. DOOLEY

Next in Merit.....Louis D. Moorhead

Students of College Department

Amberg, Edward J.	Junior
Barry, Gerald A.	Freshman
Barth, Walter	Freshman
Bouvais, Ernest A.	Freshman
Burke, John P.	Senior
Byrnes, Joseph W.	Junior
Caverley, Edward E.	Junior
Chojnacki, Leo	Junior
Clennon, Thomas C. A.	Senior
Colnon, John Aaron	Senior
Crotty, John W.	Freshman
Cunningham, Daniel F.	Sophomore
De Haye, Francis N.	Freshman
DiGiovanni, Charles S.	Sophomore
Dooley, William G.	Senior
Duffy, Edward J.	Freshman
Dunne, Edward W.	Freshman
Elward, John J.	Freshman
Foley, Leo	Senior
Gallery, Daniel J.	Freshman
Garland, Robert J.	Senior
Goggins, J. Leo	Freshman
Green, Earl	Freshman
Hanrahan, James R.	Freshman
Hanson, James	Freshman
Hayes, Lambert K.	Junior
Herr, Frederick M.	Freshman
Horick, Edward J.	Freshman
Jackson, Richard V.	Freshman
Jacobsen, Jerome	Freshman
Kehoe, James E.	Junior

Kerwin, Joseph	Sophomore
Larkin, James J.	Sophomore
Lischka, Charles A.	Freshman
McConnell, George L.	Freshman
Mangan, James T.	Freshman
Maresh, Francis J.	Freshman
Martin, Stanley J.	Freshman
Molloy, Edward P.	Freshman
Molloy, James P.	Sophomore
Monaco, Donato F.	Freshman
Moriarty, Maurice J.	Freshman
Murphy, Clarence F.	Sophomore
Nolan, Peter E.	Sophomore
O'Connor, James J.	Freshman
Orlowski, Francis J.	Junior
Ostrowski, Theodore C.	Freshman
Peterson, John G.	Sophomore
Quigley, Walter T.	Freshman
Reynolds, Edward D.	Sophomore
Richards, Harlan J.	Freshman
Rudziewicz, Stanislaus G.	Sophomore
Rutkowski, Stephen A.	Freshman
Ryan, William H.	Freshman
Sujak, Francis T.	Freshman
Thiele, Ernest W.	Sophomore
Vitmanski, Peter P.	Sophomore
Walsh, Ignatius P.	Freshman
Warzynski, Francis S.	Junior
Welsh, Michael E.	Freshman
Skweres, John	Junior

FORTY-SIXTH
ANNUAL ANNOUNCEMENT

of the

Bennett Medical College

OF CHICAGO

MEDICAL DEPARTMENT
of
LOYOLA UNIVERSITY

Telephone Haymarket 856
Address all Communications: Bennett Medical College
1358-1362 Fulton Street, Chicago, Ill.

College Calendar 1913-1914

1913

Monday, September 1st.....Labor Day; Holiday.
Monday, September 15th...Entrance and Conditional Examinations Begin.
Monday, September 22d....Reception and Introductory Addresses, 8 p. m., at College Amphitheatre.
Tuesday, September 23d....Regular Session Begins.
Thursday, November 13th..Special Alumni Day.
Thursday, November 27th..Thanksgiving Day; Holiday.
Saturday, Dec. 20th, 1 p. m..Christmas Vacation Begins.

1914

Monday, January 5th.....College Work Resumed, 8 a. m.
Monday, January 12th.....Examinations Commence.
Monday, January 26th..... Second Term Begins.
Friday, Saturday.....Easter Holiday.
Thursday, May 14th.....Alumni and Seniors' Banquet.
Sunday, May 10th.....Baccalaureate Address.
Friday, May 29th..... Second Term Ends.
Saturday, May 30th.....Memorial Day; Holiday.
Monday, June 8th..... Summer Term Begins.
Friday, June 19th.....Alumni Reunion, 10 a. m., College Amphitheatre.
Friday, June 19th.....Annual Commencement, 8 p. m
Saturday, July 4th.....Independence Day; Holiday.
Saturday, September 26th.. Third Term Ends.

THE COUNCIL.

The executive body of the Faculty is the Council. The duties of the Council are to maintain discipline, recommend to the Trustees the appointment of members of the Faculty, superintend the curriculum, and otherwise act as an executive committee.

Maximilian Joseph Herzog, M. D., LL. D., Dean.
Henry Stanislaus Spalding, S. J.
Edgar Mead Reading, A. M., M. D.
Nathaniel Abraham Graves, A. B., M. D.
John Dill Robertson, B. S., M. D.
Henry Foster Lewis, A. B., M. D.
Jacob Franklin Burkholder, M. D.
Arthur Bennett Rankin, B. A., M. B.
William Alexander Newman Dorland, M. A., M. D.
Oscar Brunk Funkhouser, M. D.
Otto Charles Huber, B. S., M. D.
Aime Paul Heineck, M. D.
Frank Marion Horstman, Ph. G., M. D.
Felipp Kreissl, M. D.
David Lieberthal, M. D.
Ulysses Joshua Grim, M. D.
Charles Henderson Miller, M. D.
John Vosburgh Stevens, M. D., Secretary, (*ex officio*).

ADMINISTRATIVE OFFICERS.

Maximilian Joseph Herzog, M. D., LL. D., Dean.
John Dill Robertson, M. D., President.
Owen Thomas Owen, A. B., Registrar.
Arthur B. Rankin, B. A., M. B., Junior Dean.
James Alexander Waugh, Bursar and Curator.

The Registrar is authorized to conduct correspondence with students; and through him will be obtained from the Dean of the College information concerning credits for preliminary education and for work done in other institutions.

The College office is open daily and by appointment either the Registrar or representatives may be seen in the evening. Address all correspondence to Business Manager, Bennett Medical College. Telephone: Haymarket 856.

The receipts for money must be signed by the Bursar, Mr. James A. Waugh.

LOCATION.

The college is located at the corner of Ada and Fulton streets and can be easily reached by several car lines. Take the Madison, Randolph, or Fulton street cars to Ada street, thence north to the college, or take the Lake Street Elevated to Sheldon Street Station, which is within two blocks of the College.

The Faculty of Bennett Medical College

Representing Loyola University

JOHN LOUIS MATHERY, S. J., PRESIDENT.

HENRY S. SPALDING, S. J., REGENT,

DIRECTOR OF AFFILIATED WORK OF THE UNIVERSITY.

MAXIMILIAN JOSEPH HERZOG, M. D., LL. D., Dean....59 E. Madison St.
Professor of Pathology, Bacteriology and Hygiene.

EDGAR MEAD READING, A. M., M. D.....6338 Monroe Ave.
Professor of Neurology.

NATHANIEL ABRAHAM GRAVES, A. B., M. D.....2258 Cornelia St.
Professor of Medicine.

JOHN DILL ROBERTSON, B. S., M. D.....32 N. State St.
Professor of Surgery and Clinical Surgery.

HENRY FOSTER LEWIS, A. B., M. D.....29 E. Madison St.
Professor of Gynecology.

JACOB FRANKLIN BURKHOLDER, M. D.....108 N. State St.
Professor of Ophthalmology.

NOBLE MURRAY EBERHARDT, A. M., M. S., M. D.....7 W. Madison St.
Professor of Physiological Therapeutics.

ARTHUR BENNETT RANKIN, B. A., M. B.....1360 Fulton St.
Professor of Anatomy.

OTTO CHARLES HUBER, B. S., M. D.....7217 W. Madison St.
Professor of Chemistry.

WILLIAM ALEXANDER NEWMAN DORLAND, M. A., M. D.....
.....808 Chicago Savings Bank Bldg.
Professor of Obstetrics.

DAVID LIEBERTHAL, A. M., M. D.....31 N. State St.
Professor of Dermatology.

FELIPP KREISSL, M. D.....5 N. Wabash Ave.
Professor of Genito-Urinary Diseases.

ULYSSES JOSHUA GRIM, M. D.....31 N. State St.
Professor of Otology and Rhino-Laryngology.

FRANK MARION HORSTMAN, Ph. G., M. D....725 S. Central Park Ave.
Professor of Physiology.

CHARLES HENDERSON MILLER, M. D.....805 E. 63rd St.
Professor of Pharmacology and Therapeutics.

WILLIAM JOHN POLLOCK, B. S., M. D.....2100 W. Chicago Ave.
Professor of Medicine.

WILLIAM FRANCIS WAUGH, A. M., M. D.....1360 Fulton St.
Dean Emeritus and Professor of Tropical Medicine.

CHARLES J. WHALEN , M. D.....15 E. Washington St.
Professor of Medicine.

SETH SCOTT BISHOP, B. S., M. D., LL. D.....31 N. State St.
Professor of Otology and Rhino-Laryngology.

JOHN VOSBURGH STEVENS, M. D.....100 Loomis St.
Professor of Pediatrics.

WILLIAM RITTENHOUSE, A. M., M. D.....31 N. State St.
Professor of Obstetrics.

EUGENE SOLOMON TALBOT, M. S., D. D. S., M. D., LL. D.....
.....122 S. Michigan Ave.
Professor of Stomatology and Dental Surgery.

STUART JOHNSTONE, M. D.....159 N. State St.
Professor of Gynecology.

WILLIAM BERINGER MARCUSSON, A. M., M. D.....1551 W. Madison St.
Professor of Surgery.

BENJAMIN HARRISON BREAKSTONE, B. S., M. D.....32 N. State St.
Professor of Surgery.

ANTON THEODORE HARRIS HOLMBOE, M. D.....1045 N. Sacramento Ave.
Professor of Orthopedic Surgery.

FRANK BYRNES, M. D.....29 E. Madison St.
Professor of Surgery.

HENRY GEORGE WILLIAM REINHARDT, M. D.....2656 Logan Boul.
Professor of Forensic Medicine.

AIME PAUL HEINECK, M. D.....32 N. State St.
Professor of Clinical Surgery.

HUGH NEIL MACKECHNIE, A. B., M. D., C. M., F. T. M. C.....
.....7 W. Madison St.
Professor of Surgery.

CHARLES ALBERT WADE, M. D.....3218 W. Jackson Boul.
Professor of Pediatrics.

GORDON GRANGER BURDICK, M. D.....7 W. Madison St.
Professor of Physiological Therapeutics.

THEODORE CHARLES FREDERICK ABEL, M. D.....7 W. Madison St.
Professor of Clinical Diagnosis.

HARRY LYNCH O'CONNOR, B. S., M. D.....10 S. Ashland Boul.
Professor of Surgical Pathology.

OSCAR BRUNK FUNKHOUSER, M. D.....619 S. 40th Ave.
Professor of Medical Diagnosis.

THOMAS HOGAN, LL. B.....815 Ashland Block
Professor of Medical Jurisprudence.

KAZIMIR AMBROSE ZURAWSKI, B. A., M. D.....32 N. State St.
Professor of Dermatology.

ARTHUR GAMMAGE, LL. B.....835 Ashland Block
Professor of Medical Jurisprudence.

ALFRED DE ROULET, M. S., M. D.....15 E. Washington St.
Clinical Professor of Gynecology and Curator of the Museum.

JAMES JOSEPH MCGUINN, M. D.....7 W. Madison St.
Clinical Professor of Surgery.

ROLAND HODGES PHILLIPS, Ph. G., B. S., M. D.....1526 W. Madison St.
Clinical Professor of Medicine.

CAMILLO VOLINI, M. D.....2929 Washington Boul.
Clinical Professor of Surgery.

CARL WAGNER, M. D.....160 Eugenia St.
Clinical Professor of Ophthalmology.

JEREMIAH HENRY WALSH, M. D.....3202 Washington Boul.
Associate Professor of Surgery.

ELZEAR LA MOTHE, A. B., M. D.....17 W. Madison St.
Associate Professor of Ophthalmology.

DOUGLAS AMOS PAYNE, M. D.....108 N. State St.
Associate Professor of Ophthalmology.

ARTHUR EDISON GAMMAGE, M. D.....6405 N. Clark St.
Junior Professor of Clinical Surgery.

THOMAS DOWNES LAFTRY, M. D.....16 N. Kedzie Ave.
Junior Professor of Surgery.

RICHARD JAY LAMBERT, Ph. G., M. D.....St. Charles, Ill.
Junior Professor of Therapeutics.

JOHN HAROLD EDGECOMB, M. D.....3158 Jackson Boul.
Junior Professor of Surgery.

ARTHUR LEDERER, M. D.....1604 Mallers Bldg.
Associate Professor of Hygiene and Sanitary Science.

ELMER HOLMES FLINN, M. D.....3168 Ogden Ave.
Junior Professor of Materia Medica.

THOMAS HENRY KELLEY, M. D.....1001 E. 75th St.
Junior Professor of Surgery.

LESLIE FRANCIS MACDIARMID, M. D.....7 W. Madison St.
Junior Professor of Medicine.

JOHN FRANCIS TYRELL, A. B., LL. B.....39 N. Clark St.
Junior Professor of Medical Jurisprudence.

ARTHUR EDWARD LEHNER, M. D.....3001 N. Central Park Ave.
Junior Professor of Clinical Medicine.

WILLIAM OSCAR SWEEK, M. D.....1358 Fulton St.
Assistant Professor of Bacteriology and Clinical Pathology.

WILLIAM BERNARD MCCAULEY, M. D.....7043 N. Clark St.
Junior Professor of Surgery.

CHARLES WILLIAM CLARK, M. D.....301 E. 61st St.
Junior Professor of Surgery.

ALBERT HOWARD CARTER, M. D.....1551 W. Madison St.
Instructor of Surgery.

JOHN JOSEPH MEANY, M. D.....3736 W. Chicago Ave.
Clinical Instructor of Surgery.

ANDREW COSMAS GARVY, A. B., M. D.....1104 Wilson Ave.
Instructor of Surgery.

ARTHUR HENRY WEIS, M. D.....2783 Lincoln Ave.
Instructor of Medicine.

LEO STEINER, M. D.....1822 S. Halsted St.
Instructor of Materia Medica.

THOMAS ALBERT CARTER, B. S., M. D.....919 Wellington St.
Clinical Assistant in Gynecology.

WILLIAM ALLEN PORTER, M. D.....7 W. Madison St.
Instructor of Laryngology.

FRANCES HELEN COOK, M. D.....7631 S. Sangamon St.
Instructor of Gynecology.

JAMES HENRY MORAN, M. D.....567 E. 71st St.
Instructor of Medicine.

ARTHUR CALDWELL GILLAM, A. M., M. D.....1612 Milwaukee Ave.
Instructor of Gynecology.

BENJAMIN EDELSTEIN ELLIOT, B. S., M. D.....4617 Calumet Ave.
Demonstrator of Anatomy.

REID OWEN HOUSER, M. D.....5681 W. Madison St.
Demonstrator of Anatomy.

EVA HANSEN, M. D.....1360 Fulton St.
Instructor of Ophthalmology.

DAVID O'SHEA, M. D.....1803 S. Ashland Ave.
Clinical Assistant in Gynecology.

WALTER FRANZ VON ZELINSKI, B. S., M. D.....4709 N. Rockwell St.
Assistant in Anatomy.

JACK MOSES, M. D.....603 S. Halsted St.
Clinical Assistant of Medicine.

HENRY RANDAL KENNY, A. B., M. B., B. Ch., B. A. O..3725 Fullerton Ave.
Assistant in Anatomy and Gynecology.

CLEVELAND CHARLES MCLANE, M. D. C.....1360 Fulton St.
Assistant in Pathology.

DANIEL JAMES PARADINE, B. S., M. D.....1360 Fulton St.
Assistant in Anatomy.

CLEVELAND SHAMBAUGH, M. D.....6903 S. Halsted St.
Assistant in Medicine.

ALBERT CARL APKING, M. D.....1360 Fulton St.
Assistant in Medicine.

MARY MULCAHY, M. D.....1360 Fulton St.
Assistant in Pathology and Obstetrics.

HALDER CARLSEN, M. D.....1360 Fulton St.
Assistant in Pathology.

D. M. DAVIDSON, M. D.....1360 Fulton St.
Assistant in Physiology.

THOMAS GAIL WALLIN, M. D.....1360 Fulton St.
Assistant in Obstetrics.

HERMAN BOHL, M. D.....1360 Fulton St.
Assistant in Medicine.

WILLIAM HENRY GEHL, M. D.....1360 Fulton St.
Assistant in Anatomy and Medicine.

HISTORY.

Bennett Medical College was chartered by an act of the General Assembly of Illinois in 1868. Over two thousand students have been graduated since that time. The aim of this College has always been to furnish instruction of a practical character, so as to send out well qualified practitioners of medicine rather than scientific doctors. At the same time the necessity of a sound scientific foundation is appreciated.

The College came under its present management in 1908 and has since then shown phenomenal growth. The Illinois Medical College and the Reliance Medical College were absorbed by Bennett in 1910, so that three colleges were united to increase the strength of the one.

In 1910 affiliation with Loyola University was consummated. Thus the influence of a great University added greatly to the support and standing of Bennett Medical College.

Our students have the advantage of the expert pedagogical advice, as well as the material advantage of the library, gymnasium, athletic fields, and other departments of Loyola University.

GOVERNMENT.

The financial government of the college is vested in a Board of Trustees.

The educational work of the college is under the direct supervision of the Loyola University, who, with the Council and faculty of the medical college prepare and enforce the curriculum outlined in this announcement.

GENERAL STATEMENT.

The forty-sixth annual Course of Study in Bennett Medical College will begin September 23, 1913, and will continue eight months, closing May 29, 1914. The regular college year is divided into two terms, the first ending January 25, 1914. The second term begins January 26, 1914, and ends May 26, 1914. Commencement exercises will occur in common with the other Departments of Loyola University.

The course of instruction leading to the degree of Doctor of Medicine is carefully graded and covers a period of four

years of eight months each, consisting of lectures, recitations, conferences and laboratory work, with attendance upon dispensary and hospital clinics. Great care has been exercised in arranging the curriculum for the entire course so that the student may not only be thoroughly qualified in theoretical matters, but that he shall receive the utmost amount of practical training. Each student is given personal attention, will make personal examinations of cases and do personal work in the laboratories, clinics and at the bedside.

The college is located in a district where there is an abundance of clinical material. Cook County Hospital, which averages 1,000 bed patients daily, is but ten minutes' walk from the College while the Jefferson Park Hospital is only a few blocks distant. Students are required to attend clinical instruction in these institutions daily in addition to the clinical work done in the college building. Members of our faculty are on the attending staffs of the Chicago Union, Lake View, Cook County, Deaconess, Jefferson Park, Columbus, St. Joseph's, St. Anthony's, St. Bernard's, St. Elizabeth's, Maimonides, Rhodes Avenue, Lakeside, and other hospitals. Students of the College will attend in small sections clinics at these various hospitals.

The College Buildings.

The buildings occupied by the Bennett Medical College were built for medical purposes. They are located in a part of the city easily accessible and within a few blocks of Chicago's great medical center. The rooms are well ventilated, heated, and lighted. There are two amphitheaters, four commodious lecture halls and many clinic rooms. The laboratories occupy two entire floors. There are also library and reading rooms, drug room, also receiving and retiring rooms.

In 1910 an addition to the college proper was erected, making commodious quarters, and for the most part used for additional Laboratories, and devoted to the Study of Physiology, Anatomy, Chemistry, Pathology, Bacteriology, Histology and Pharmacology.

One large floor is devoted exclusively to the study of modern medical and theoretical chemistry. This science is a very important factor to the medical student and ranks in importance with anatomy and pathology. The chemical laboratories are fitted up with modern work desks and tables, with running water, gas, fume-chambers and all the necessary ap-

pliances for teaching inorganic chemistry, qualitative and quantitative analysis, volumetric analysis, as well as the most advanced organic and physiological chemistry; modern medicine demands a very exhaustive study of this science, and the college is prepared to meet that demand.

The laboratories devoted to histology, embryology, pathology, bacteriology, and neurological anatomy occupy another floor, where all the necessary apparatus is installed for teaching these sciences in the most approved manner.

The top floor of the new annex is devoted to the study of anatomy. As all who are versed in the subject of the history of medicine know, an intimate first-hand knowledge of the structure of the human body is essential for the successful practice of any branch of medicine or surgery, and one of the most hopeful signs for the success of the great movement that is at the present time taking place in medical educational methods is the prominent place that all medical educators are giving to the subject of anatomy. The entire top floor is equipped for the proper study of this science. The rooms are light and airy and are arranged according to the most approved sanitary ideas.

Each floor is provided with lecture rooms for classes, private rooms for professors, and for students who wish to devote time to some piece of research work.

By utilizing her unexcelled clinical advantages Chicago offers exceptional opportunity to summer students. The summer is the season of the greatest mortality, and there are important groups of diseases to be seen in that portion of the year only. Hence the value of practical work in diseases peculiar to the season.

Library.

The Library is situated on the first floor, easy of access to the entire student body. It has been acquired by purchase, and by donations from Students, Alumni and members of the Faculty. It contains a large number of reference books, dictionaries and current medical Journals. An attendant is constantly present to aid the student.

In addition to this library, our students have access to the large general libraries of Loyola University, 47,000 volumes. In Chicago, students have access to the Chicago Public Library, 352,093 volumes; the John Crerar Library, 228,000 volumes; the Newberry Library, 179,967 volumes; and the Library of the Chicago Historical Society, 50,000 volumes.

Hospitals.

The College Hospital, known as the Jefferson Park Hospital, is a part of Bennett Medical College and is located at 1402 West Monroe street. The college by contract of affiliation has full control of the Hospital.

It has an amphitheater capable of seating eighty students, so arranged that each student has a plain view of the pit.

During the summer of 1913, an additional wing was built, making total accommodations for 100 patients. The new Hospital embodies the latest and best ideas in Hospital construction and equipment.

The junior and senior students are required to attend clinics in this hospital daily. The students from the senior class do externe work in this hospital, two serving at one time. During this time they write histories of the patients, do the hospital laboratory work, give anesthetics under the supervision of the interne, and assist in all operations.

In addition to above is the Cook County Hospital, giving unsurpassed advantages for clinical instruction. Eighteen other hospitals in Chicago are open to students of Bennett Medical College. The Dispensary and Clinic rooms are ten in number, conveniently situated in the college buildings, where over 6,000 patients are treated each year.

Directions to Students.

A Student after arrival in Chicago, should come direct to College, corner Ada and Fulton Streets, or call up the College Office by telephone, Haymarket 856. A representative will meet him and arrange for his room, and delivery of baggage. Special care is taken to select private boarding houses, where students may have the comforts of home and a quiet room in which to pursue their studies. Board and room can be had at $4.00 to $6.00 per week. Students often procure a room and board themselves, thereby reducing the expense to below $3.00 per week.

Young men who find it necessary to meet their own expenses while attending school will be assisted in finding suitable employment outside of school hours. Our School Employment Department renders valuable service and is in touch with stores, shops, homes, Express Companies, janitor's services, Surface and Elevated Railway Companies, etc.

College Fees.

Standing and Certificates.

At the end of each session a certificate of his standing for the year is sent by mail to each student. No marks will be sent or credit given to any student who is in arrears with the College.

Fees and Expenses.

A Matriculation fee of five dollars is payable once only.

A charge of one hundred and twenty-five dollars for tuition is payable in advance for a College year of eight months.

If desired, the tuition may be paid in installments, in which case no additional charge is made, and the fees are then paid as follows:—

First payment:—Five dollars for matriculation fee and sixty-two dollars and fifty cents on account of the tuition, a total of sixty-seven dollars and fifty cents, payable at the beginning of the first term.

Second payment:—Sixty-two dollars and fifty cents the balance of the tuition, payable at the beginning of the second term.

A fee of five dollars is charged for the materials used in each laboratory course.

A fee of fifteen dollars is charged to seniors for the course in Practical Obstetrics.

There is a graduation fee of twenty-five dollars.

Students leaving the school have no claim for tuition paid.

Post-Graduate Fees.

Post-graduate fee for graduates of other schools	$125.00
Single course	50.00
Post-graduate fee for graduates of this school	50.00
Single course	30.00

A deposit of five dollars must be made on entrance to cover cost of breakage and damage of building or equipment. The unexpended balance returnable at the end of the college year. Fee for use of locker one dollar.

REQUIREMENTS FOR ADMISSION.

A medical education must be based upon a thorough preliminary training and every student preparing to take a medical course should have as a minimum amount of preparation a high school course of four years of nine months each. Those who do not possess a diploma or certificate showing the required preliminary education may take an examination conducted by the state superintendent of public instruction or like state officer. The entrance examination will be in conformity with the requirements of the State Board of Health, which include an examination in all the several branches embraced in the curriculum of a four year high school course.

The university offers in its academy excellent facilities for premedical education.

Beginning January 1st, 1914, Bennett College will require besides a four year high school course, one year of chemistry, physics, biology, and French or German, before admission to the Freshmen class. For details of this year students are advised to correspond with the Dean.

An applicant for admission to Bennett Medical College must fulfill the following conditions:

First: A creditable certificate of moral character, signed by two physicians of good standing in the state from which he comes.

Second: He must deposit with the college the sum of $5.00 for matriculation and present a diploma of graduation from a literary or scientific college or high school or pass a satisfactory examination in conformity with the requirements of the State Board of Health.

ADMISSION TO ADVANCED STANDING.

Students from fully recognized colleges will be given credit for the time spent in these colleges upon presentation of credits for work done and a certificate of attendance. This College reserves the right to require examination of such applicants. Graduates from approved colleges of medicine will be admitted to the senior year without examination.

REQUIREMENTS FOR GRADUATION.

1. Attainment of 21 years of age.
2. Credible certificate of good moral character.

3. Satisfactory behavior while in college.

4. Attendance on four courses of medical instruction of at least eight months each in separate calendar years.

5. Regular attendance during the course on all prescribed exercises.

6. Satisfactory examination in all branches.

7. Attendance on two courses of lectures in anatomy and dissection of a lateral half of the human body.

8. Graduation fee of twenty-five dollars.

GENERAL PLAN OF THE CURRICULUM AND SCHEDULE IN HOURS.

The regular course of study in the Bennett Medical College, leading up to the degree of Doctor of Medicine, comprises a four years' course of eight months each.

The arrangement of the subjects and the hours devoted to each is as follows, but the faculty reserves the right to make such changes in the schedule as it may deem advisable:

FRESHMAN YEAR.

Subjects	Recitations	Laboratory	Total
Chemistry	90	120	210
Physiology	30	30	60
Anatomy	180	480	660
Materia Medica	60	...	60
Biology	30	30	60
Histology and Embryology	60	180	240
	450	840	1290

SOPHOMORE YEAR.

Subjects	Recitations	Laboratory	Total
Physiological Chemistry	45	15	60
Chemistry	30	60	90
Nervous Anatomy	30	60	90
Anatomy	60	300	360
Physiology	60	60	120
Pathology	90	180	270
Bacteriology	45	90	135
Therapeutics	30	30	60
Surgery	30	...	30
	420	795	1215

JUNIOR YEAR.

Subjects	Recitations	Laboratory and Clinics	Total
Medicine	60	180	240
Surgery	90	150	240
Obstetrics	90	...	90
Gynecology	60	30	90
Pediatrics	30	30	60
Physiological Therapeutics	30	...	30
Dermatology	30	30	60
Otology and Laryngology	30	30	60
Therapeutics	60	60	120
Ophthalmology	30	30	60
Clinical Diagnosis	15	45	60
Surgical Pathology	30	60	90
Operative Surgery	...	12	12
	555	657	1212

SENIOR YEAR.

Subjects	Recitations	Laboratory and Clinics	Total
Medicine	120	150	270
Surgery	90	240	330
Obstetrics	120	60	180
Gynecology	60	60	120
Ophthalmology	15	15	30
Genito-Urinary	30	30	60
Otology and Laryngology	...	90	90
Neurology	30	30	60
Dermatology	30	30	60
Forensic Medicine	30	...	30
	525	705	1230

At the end of each term the standing of a student in each of his courses will be reported by the instructor to the Secretary and is entered on record. Records are not given to the students who are in arrears in their tuition fees.

Work reported as of Grade D must either be made good at the next following opportunity for re-examination, or must be taken again in the class room if credit is to be obtained. Work reported as of grade E, or in which two D's have been reported must be made up in class.

Students' reports will bear the following grades: A—excellent; B—good; C—passable; D—repeat examination only; E—repeat entire course class work and examinations.

All scheduled courses prescribed in this catalogue as necessary for the degree of Doctor of Medicine must be passed before graduation, or the student may repeat the study during another term and be examined with the next class. Students who have failed in the equivalent of thirty-five per cent of the work of the term must repeat the work of the term.

HOSPITAL POSITIONS.

House physicians are appointed from each graduating class to serve as internes, thus giving those who desire to avail themselves of this opportunity a most thorough and practical finish. Fifty internes are chosen by competitive examination to serve eighteen months in Cook County Hospital.

Bennett students are eligible to compete for these, as well as positions as internes in thirty other hospitals in Chicago and vicinity. This year every graduate who so desired was furnished with a hospital interneship.

Internes are given their board, room and laundry for their service in the hospitals. These appointments are of great value, and are much desired and sought after by the young medical graduate of today.

POST-GRADUATE COURSE.

The advantages offered practitioners by this college for a post-graduate course are excellent. The studies in the senior year work are practical in every particular. They are supplemented by a variety of daily clinics in which there is opportunity for practitioners to become familiar with the latest methods, both in diagnosis and treatment. Facilities will be furnished those who desire to pursue any particular line of work. Special advantages are extended to those who desire temporary appointments as clinical assistants.

Practitioners can enter at any time and can take the work in any department of the regular course of study at moderate cost. Any practitioner of medicine in good standing may take this course.

Graduates of approved medical colleges may, by attending one full college year and fulfilling the requirements, receive the regular diploma from Bennett Medical College. This plan of post-gradute work is recommended, as it offers to the practitioner the advantages of a recent college course.

It gives a practical finish to his education which cannot be obtained in any other way.

FRESHMAN SCHEDULE — First Term (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9 to 10	Sec. 2 Anatomy Rankin Sec. 1 Dissection	Sec. 1 Anatomy Rankin Sec. 2 Dissection	Osteology Rankin	Sec. 2 Anatomy Rankin Sec. 1 Dissection	Osteology Rankin	Sec. 1 Chem. Lab. Huber Sec. 2 Dissection
10 to 12	Sec. 1 and 2 Dissection	Sec. 1 Chem. Lab. Huber Sec. 2 Dissection	Sec. 1 Dissection Sec. 2 Osteology Lab.	Sec. 1 Dissection Sec. 2 Chem. Lab. Huber	Sec. 1 Osteology Lab. Sec. 2 Dissection	Sec. 1 Anatomy Rankin Sec. 2 Dissection
12 to 1	Noon Recess					Biology Horstman
1 to 2	Chemistry Huber	Terminology Dorland	Anatomy Rankin	Chemistry Huber	Chemistry Huber	
2 to 3	Sec. 1 and 2 Dissection Elliott Howser	Sec. 1 and 2 Dissection Elliott Kenny	Sec. 1 Dissection Paradine Sec. 2 Chem. Lab. Huber	Anatomy Quiz	Anatomy Quiz	
3 to 4				Sec. 1 Biology Lab. Horstman Sec. 2 Dissection Gehl	Sec. 1 Dissection Kenny Sec. 2 Biology Lab. Horstman	
4 to 5	Sec. 1 Dissection Gehl Sec. 2 Biology Quiz	Sec. 1 Biology Quiz Sec. 2 Dissection Kenny	Biology Horstman			

Second Term—Histology, Embryology, Materia Medica and Physiology replace Osteology and Biology.

SOPHOMORE SCHEDULE — First Term (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8 to 10	Sec. 1 Pathology Lab. Herzog Sec. 2 Org. Chem. Lab. Huber	Sec. 2 Pathology Lab. Herzog Sec. 1 Org. Chem. Lab. Huber	Sec. 1 Pathology Lab. Herzog Sec. 2 Org. Chem. Lab. Huber	Sec. 2 Pathology Lab. Herzog Sec. 1 Org. Chem. Lab. Huber	Sec. 1 Pathology Lab. Herzog Sec. 2 Dissection Rankin	Sec. 2 Pathology Lab. Herzog Sec. 1 Physiology Lab. Horstman
10 to 11	Pathology Herzog	Bacteriology Herzog	Pathology Herzog	Bacteriology Herzog	Pathology Herzog	Sec. 1 Dissection Rankin
11 to 12	Org. Chem. Huber	Mat. Medica Miller	Org. Chem. Huber	Mat. Medica Miller	Org. Chem. Huber	Sec. 2 Physiology Lab. Horstman
	NOON RECESS					
1 to 2	Sec. 1 Anatomy Rankin Sec. 2 Dissection Elliott	Sec. 2 Anatomy Rankin Sec. 1 Dissection Elliott	Sec. 1 Dissection Rankin	Sec. 1 Anatomy Rankin Sec. 2 Dissection Elliott	Sec. 2 Anatomy Rankin Sec. 1 Dissection Elliott	Physiology Horstman
2 to 3	Sec. 1 Anatomy Quiz Sec. 2 Dissection Howser	Sec. 2 Anatomy Quiz Sec. 1 Dissection Kenny	Sec. 2 Pharmacology Lab. Miller	Sec. 1 Anatomy Quiz Sec. 2 Dissection Howser	Sec. 2 Anatomy Quiz Sec. 1 Dissection Kenny	Minor Surgery Robertson
3 to 4	Sec. 1 Physiology Lab. Horstman	Sec. 1 Bacteriology Lab. Herzog	Physiology Horstman	Sec. 1 Dissection Gehl	Sec. 1 Bacteriology Lab. Herzog	
4 to 5	Sec. 2 Bacteriol. Lab. Sweek	Sec. 2 Physiology Lab. Horstman	Bacteriol. Quiz. Maclane	Sec. 2 Bacteriol. Lab. Sweek	Sec. 2 Dissection Gehl	

SOPHOMORE SCHEDULE Second Term (Provisional)

HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8 to 10	Sec. 1 Neurology Lab. Rankin Sec. 2 Physiol. Chem. Lab. Huber	Sec. 2 Pathology Lab. Herzog Sec. 1 Physiol. Chem. Lab. Huber	Sec. 1 Pathology Lab. Herzog Sec. 2 Physiol. Chem. Lab. Huber	Sec. 2 Neurology Lab. Rankin Sec. 1 Physiol. Chem. Lab. Huber	Sec. 1 Pathology Lab. Herzog Sec. 2 Dissection Von Zelinski	Sec. 2 Pathology Lab. Herzog Sec. 1 Physiology Lab. Hortsman
10 to 11	Neurology Rankin	Pathology Herzog	Neurology Rankin	Pathology Herzog	Pathology Herzog	Sec. 1 Dissection Rankin Sec. 2 Physiology Lab. Hortsman
11 to 12	Physiol. Chem. Huber	Mat. Medica Miller	Physiol. Chem. Huber	Mat. Medica Miller	Physiol. Chem. Huber	
1 to 2	Sec. 1 Anatomy Rankin Sec. 2 Dissection Elliott	Sec. 2 Anatomy Rankin Sec. 1 Dissection Elliott	Sec. 1 Dissection Paradine	Sec. 1 Anatomy Rankin Sec. 2 Dissection Elliott	Sec. 2 Anatomy Rankin Sec. 1 Dissection Elliott	Physiology Hortsman
2 to 3	Sec. 1 Anatomy Quiz Sec. 2 Dissection Elliott	Sec. 2 Anatomy Quiz Sec. 1 Dissection Elliott	Sec. 2 Pharmacology Lab. Miller	Sec. 1 Anatomy Quiz Sec. 2 Dissection Elliott	Sec. 2 Anatomy Quiz Sec. 1 Dissection Elliott	Minor Surgery Robertson
3 to 4	Sec. 1 Dissection Gehl	Sec. 1 Physiology Lab. Hortsman	Physiology Horstman	Sec. 1 Dissection Gehl	Sec. 1 Physiology Quiz	
4 to 5	Sec. 2 Physiology Lab. Horstman	Sec. 2 Dissection Kenny	Embryology	Sec. 2 Physiology Quiz	Sec. 2 Dissection Kenny	

JUNIOR SCHEDULE (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9 to 10	Medical Diagnosis Funkhouser	Dermatology Zurawski	Nose and Throat Grim	Medical Diagnosis Funkhouser	Obstetrics Rittenhouse	Surgical Pathology O'Connor
10 to 11	Obstetrics Rittenhouse	Medicine MacDiarmid	Neurology Burkholder	10:30 to 12 M	Medicine MacDiarmid	Surgical Clinic Robertson Gammage J. P H.
11 to 12	Surgery MacKechnie McCauley Edgecomb	Gynecology Lewis	Surgery MacKechnie McCauley Edgecomb	Autopsies Cook Co. Hospital Herzog	Surgery MacKechnie McCauley Edgecomb	
1 to 2	Therapeutics Miller	Eye Hansen Clin. Path. Sweek Gynecology Recitation	Ward Walks Sec Clinics 2 to 5 at St. Anne's, Rhodes Ave., Jefferson Park, Columbia, Lake Side, Columbus, Sheridan Park, and Maimonides Hospitals Operations on The Cadaver and Dog	Therapeutics Lambert	Eye Hansen Clin. Path. Sweek Gynecology Recitation	Obstetrics Dorland
2 to 3	Dispensary Clinics	Dispensary Clinics		Dispensary Clinics	Dispensary Clinics	Dispensary Clinics
3 to 4	Medicine Weis	Pediatrics Wade Stevens		Surgical Pathology O'Connor	Medicine Weis	
4 to 5	Medicine Moran	Surgical Pathology O'Connor		Medicine Apking	Medicine Moran	

SENIOR SCHEDULE (Provisional)

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8 to 9	Surgery Quiz Sections	Gynecology De Roulet J. P. H.	Surgery Quiz Sections	Medicine Quiz Sections	Medicine Quiz Sections	Medicine Quiz Sections
9 to 10	Medicine Clinic Graves J. P. H.	Surgery Robertson J. P. H.	Medicine Graves	Obstetrics Dorland	Dermatology Lieberthal	Obstetrics Dorland
10 to 11	Medicine Clinic Pollock J. P. H.	Surgical Clinic Robertson J. P. H.	Medicine Pollock	Surgery Clinic Heineck J. P. H.	Nose and Throat Clinic Grim J. P. H.	Surgery Byrnes
11 to 12	Medicine Clinic Whalen J. P. H.	Medical Clinic Funkhouser Grace Hospital	Opthalmology Burkholder	Medicine Clinic Funkhouser Grace Hospital	Surgery Clinic Marcusson J. P. H.	Gynecology Lewis
1 to 2	Neurology Reading	Eye Clinic Bracken J. P. H.	Medical Clinic Williamson C. C. H.	Orthopedic Surgery Holmboe	Medicine Whalen	Surgical Clinic Keyes C. C. H.
2 to 3	Surgical Clinic Breakstone J. P. H.	Medical Clinic Weis J. P. H.		Neurology Reading	Forensic Medicine Gammage Reinhardt	
3 to 4			Gynecology Clinic Lewis C. C. H.	Neurological Clinic C. C. H.	Genito Urinary Kreissl	Surgical Clinic Morf C. C. H.
4 to 5	Sanitary Science and Hygiene Lederer	Mental Diseases Physiologic Therapeutics Wood Burdick		Dermatological Clinic C. C. H. Simpson	Medicine Clinic Pollock J. P. H.	

Schedule of Subjects Offered in Academic and Secondary Schools, Credits in Which are Acceptable for Entrance to the Preliminary College Year Leading to the Medical Courses.

SUBJECTS.	UNITS.	REQUIRED.	ELECTIVE.
ENGLISH			
Reading and Practice	2	2	...
Study and practice	1	...	1
MATHEMATICS			
Algebra to Quadratics	1	1	...
Algebra (Quadratic Equations, Binomial Theorem and Progressions)	½	...	½
Plane Geometry	1	1	...
Solid Geometery	½	...	½
Trigonometry	½	...	½
LATIN			
Grammar and Composition	1	1	...
Caesar	1	1	...
Ciero	1	...	1
Virgil	1	...	1
Cornelius Nepos	1	...	1
Greek			
Grammar and Composition	1	*	1
Xenophon	1	...	1
Homer	1	...	1
German (or French)			
Elementary	2	2	...
Intermediate	1	...	1
French (or German)			
Elementary	2	**	2
Intermediate	1	...	2
Spanish			
Elementary	2	...	2
Scandinavian			
Elementary	2	...	2
HISTORY			
American History and Civil Government	1	1	...
Greek and Roman History	1	...	1
Medieval and Modern History	1	...	1
English History	1	...	1
Science†			
Botany and Zoology, each or Biology	1	...	1
	1	...	1
Chemistry	1	...	1
Physics	1	...	1
Physiography	½	...	½
Physiology	½	...	½
Agriculture	1	...	1
Drawing	1	...	1
Manual Training	1	...	1
Domestic Science	1	...	1
Music			
Appreciation or Harmony	1	...	1
Total	38½	9	29½

A *unit* is the credit value of at least 36 weeks' work of 4 or 5 recitation periods per week, each recitation period to be of not less than 40 minutes. In other words, a unit represents a year's study in any subject in a secondary school constituting approximately a quarter of a full year's work. A satisfactory year's work in any subject cannot be accomplished under ordinary circumstances in less than 120 sixty-minute hours, or their equivalent.

Required Branches: Of the 14 units of high-school work the subjects in capitals aggregating 9 units are required. Other work to the amount of at least 5 units may be made up from any of the other subjects of the above schedule.

* Two units of Greek may be substituted for the two required units of Latin.

** Two units of French may be substituted for the two required units in German.

† Credentials of each science course must include evidence of laboratory work.

CHEMISTRY AND TOXICOLOGY.

OTTO CHARLES HUBER, B. S., M. D., Head of the Department.

CHEMISTRY.

FRESHMAN YEAR.

Course I.

Inorganic Chemistry: Lectures and recitations, three times each week throughout the Freshman year. The fundamental laws, theories, and principles of chemistry are studied from the standpoint of modern medical research and practice. The composition, phenomena attending change of composition, properties and use of the different kinds of matter are taken up in logical sequence from their historical, industrial, economic, physiologic and therapeutic importance, in order to give the student a comprehensive grasp of the subject. The toxicology of inorganic substances is taken up with the chemistry of the particular substance considered. 90 hours.

Laboratory Exercises: Four hours each week throughout the Freshman year.

First Term: Experiments are performed by the student bearing directly upon the class work offered. As many qualitative and quantitative reactions are introduced as possible to explain and illustrate the fundamental principles and laws of chemical action. 60 hours.

Second Term: In the first half of this term particular attention is given to the determination of unknowns. In the second half, gravimetric and volumetric methods of quantitative analyses are considered. Laboratory tests for various inorganic poisons are given. 60 hours.

SOPHOMORE YEAR.

Course II.

Organic Chemistry: As an introduction to organic chemistry, the aliphatic and the aromatic series are covered and studied from the viewpoint of recent medical research in this fundamental branch of chemical science, including the toxicology of the various organic poisons. 30 hours.

Laboratory: Four hours a week, first term. As many synthetic organic compounds are made in the laboratory as time will permit. They are taken from the didactic work and are selected mainly for their illustrative importance. After the

synthetic work is finished, various methods for detecting organic poisons are given. 60 hours.

Course III.

Physiological Chemistry, Lectures and recitations, three hours each week, second term. This course covers the whole field of general physiological chemistry. Proteins, fats and carbohydrates studied in detail. The digestion of food by enzymes and digestive agents, as well as the intermediary and end products are considered. The chemistry of urine, blood, milk and faeces is thoroughly presented. 45 hours.

Laboratory Work: Four hours each week, second term. Laboratory experiments are given covering the above work. These experiments include work on fats, carbohydrates, protein, enzymes, uranalysis, gastric analysis, milk analysis and fecal analysis. 60 hours.

TEXT-BOOKS.

Inorganic Chemistry—Holland, Simon.

Organic Chemistry—Holland, Simon, Remsen.

Physiological Chemistry: Reference—Hawk, Saxe, Holland, Purdy, Halliburton.

Synthetic Chemistry—Jones, Cohen, Lassar-Cohn.

DEPARTMENT OF PHYSIOLOGY.

FRANK MARION HORSTMAN, Ph. G., M. D., Head of Department.
D. M. DAVIDSON, B. S.

FRESHMAN OUTLINE.

First Term: Biology. Didactic, 250 pp. of text. Two hours per week. 30 hours. Laboratory, two hours per week. 30 hours.

Second Term: Physiology. Didactic. Circulation and respiration to chemical changes in air and blood caused by respiration. 230 pp. of text. Two hours per week. 30 hours.

Laboratory experiments in circulation and respiration, except air analysis, two hours per week. 30 hours.

SOPHOMORE OUTLINE.

First Term: Physiology. Didactic, 230 pp. of text. Respiration, beginning at chemical changes in air and blood during respiration.

Muscle-nerve physiology.

Digestion to composition of food and action of enzymes, two hours per week. 30 hours.

Laboratory air testing and experiments in muscle-nerve and proximate principles. 30 hours.

Second Term: Didactic, 250 pp. of text. Composition of food; action of enzymes. Liver and spleen. Kidneys and skin. Ductless glands. Nutrition and heat production and regulation. Properties of the nerve-cell. Reflex action. Special senses, except eye and ear. 30 hours.

Laboratory experiments in digestion and absorption, reflexes and special senses, except eye and ear. 30 hours.

The work in this department is carried on by means of lectures, demonstrations, laboratory work and recitations, the latter covering two hours per week during two years, and in physiology of the blood all instruction except the fundamentals is given in a special course in Hematology in the Junior year.

As a preparatory for the study of physiology proper, the student receives instructions in gross and microscopic anatomy, including visceral and nervous anatomy in the departments of anatomy and histology and also as a preparation for special physiology they are given a course of thirty lectures, thirty hours of recitation and thirty hours in Laboratory work in biology, in the department of physiology, including general physiology. The work in the Freshman year in special physiology consists of thirty lectures, thirty hours of recitation and thirty hours of laboratory work and covers the physiology of the circulatory system, the blood in part, and the mechanics of respiration. During the first term of the Sophomore year, thirty hours of lectures, thirty hours of quiz and 60 hours of laboratory work cover the work in respiration not covered in the Freshman year and also muscle and nerve physiology and digestion. During the second term of the Sophomore year the same number of hours is devoted to the subject as in the first term. The topics covered are composition of food, action of enzymes, physiology of the liver and spleen, excretion, ductless glands and nutrition and heat production and regulation. The tracing of nerve impulses and kindred topics is taken up in the department of neurology; and the physiology of the eye and ear is given in special courses for those subjects in the Junior year. Instruction in physiological chemistry is given in the department of Chem-

istry. Demonstrations in capillary circulation, blood pressure and circulation time in mammals, use of sphygmograph and sphygmomanometer, general physiology of muscle and nerve, etc., are all given to sections and never to the class as a whole. Each student is furnished with an outline of these experiments covered in the laboratory work and with the assistance of the professor in charge and two assistants he performs the experiments himself, as this is considered far superior to demonstrations, in all work in which it is applicable and this is the policy followed by this department in actual work, the students writing up fully the results and conclusions for each experiment performed, the demonstrations representing only the experiments which are too difficult for the student to perform for himself.

The part of physiology taken up in laboratory work covers physiology of heart, blood in part and circulation, respiration and digestion, muscle-nerve and the central nervous system, including reflexes, special senses, excepting eye and ear. The lectures and recitations cover the entire field of physiology proper, except eye and ear.

TEXTS.

Biology—Smallwood's Textbook in Biology.
Reference—McFarland.
Physiology—Howell.
Reference—Starling, Brubaker.

THE DEPARTMENT OF ANATOMY, HISTOLOGY, EMBRYLOGY AND NEUROLOGY.

Arthur Bennett Rankin, B. A., M. B., Head of Department.
Benjamin Edelstein Elliott, B. Sc., M. D.
Walter Franz Von Zelinski, B. S., M. D.
Reid Owen Howser, M. D.
Daniel James Paradine, B. S., M. D.
Henry Randall Kenny, A. M., M. B., B. Ch., B. A. O.
William Henry Gehl, M. D.

The department of Anatomy is organized to provide for instruction in vertebrate anatomy, including human anatomy, histology, embryology and neurology. The courses in these branches are given in the Freshman and Sophomore years. In

the Junior and Senior years small sections of the classes are instructed in surgical anatomy and operative surgery on the cadaver. The anatomy of the specialties, Ophthalmology, Rhinology, Otology and Laryngology, is studied under the direction of the heads of these departments.

The anatomical laboratory is situated on the top floor of the new wing. This laboratory is large and well lighted. Space is provided for twenty-five tables. Division of the classes into sections provides ample room for sucessful work. The courses in Histology, Embryology and Neurology are conducted in the large laboratory for microscopic anatomy, on the same floor as the dissecting room. Each student is supplied with a modern microscope and the necessary laboratory accessories.

Each student must present evidence of dissection of a lateral half of a cadaver. The work is divided into four parts: (a) Dissection of an arm; (b) Dissection of a leg; (c) Dissection of abdomen; (d) Dissection of head and neck and thorax.

Courses.

FRESHMAN YEAR.

(a) *General Anatomy:* An elementary course for the medical student on the anatomy of the circulatory, respiratory and gastrointestinal organs (2 hours a week). Professor Rankin. 60 hours.

(b) *Osteology:* This course is given during the first term and consists of didactic lectures (2 hours a week) and laboratory work (2 hours a week). The student is provided with bones or models of the same for study. Associate Professor Elliott and Assistants. 60 hours.

(c) *Regional Anatomy:* A didactic course consisting of two lectures a week covering the part being dissected; laboratory work consisting of dissection, drawings and rigid quiz work. This course, comprising 16 hours a week, is continued throughout the year. Professor Rankin, Associate Professor Elliott, Drs. Howser, Kenny, Paradine and Gehl. 480 hours.

(d) *Cytology, Histology and Embryology:* A brief introductory course on the structure of the cell and the classification of tissues, followed by a systematic study of the structure of the organs and human embryology. This course is given during the second term; it consists of didactic lectures (2 hours a week) and laboratory work, consisting of stain-

ing, mounting and microscopic study of normal human tissues, illustrated by lantern demonstrations (6 hours a week). Professor Rankin and Assistants. 240 hours.

SOPHOMORE YEAR.

(a) *Regional Anatomy:* Didactic lectures (2 hours a week) and laboratory work (10 hours a week), covering the remaining parts to be dissected. This course is continued throughout the year. Professor Rankin, Associate Professor Elliott, Drs. Howser, Kenny, Paradine and Gehl. 360 hours.

(b) *Neurology:* Didactic lectures (2 hours a week) and laboratory work (4 hours a week) during the second term. This course consists in the study of the gross anatomy of the sheep's brain and human brain and cord. Professor Rankin and Assistants. 90 hours.

JUNIOR AND SENIOR YEARS.

(a) *Surgical Anatomy and Operative Surgery on the Cadaver:* This course is given in the anatomical laboratory under the direction of the department of surgery. 60 hours.

(b) *Anatomy of the Ear, Eye, Nose and Throat:* A special course conducted under the direction of the head of this department.

DEPARTMENT OF BACTERIOLOGY, PATHOLOGY AND HYGIENE.

MAXIMILIAN J. HERZOG, M. D., LL. D., Head of the Department.

ARTHUR LEDERER, M. D.
WILLIAM OSCAR SWEEK, M. D.
CLEVELAND CHARLES MACLANE, M. D. C., Assistant.
JUNE EDMONDSEN, Assistant and Curator of the Museum.
MARY MULCAHY, M. D., Assistant.
H. P. FREEMANN, M. D., Assistant.
HALDER CARLSEN, M. D., Assistant.

Laboratories: The Bacteriological and Pathological laboratories are found on the fourth floor of the main building. They are well ventilated, clean, and with the advantage of the north light for microscopic work. The laboratories are well equipped with apparatus for all kinds of work in Bacteriology and Pathology and include microscopes, complete with oil immersion lenses, apparatus needed for preparing culture

media, etc. An assortment of reagents and museum specimens of pathological conditions are found in the Museum to which considerable additions have recently been made.

Bacteriology and Protozoology.

Second year: First Term.
Two lectures per week—(30 hours.)
Recitations—1 per week—(15 hours.)
Laboratory: 2 periods per week at 3 hours—(90 hours.)

This subject is taught in lectures and recitations and in the laboratory. The lecture course will first deal with general bacteriology such as morphology and biology, etc. Under this head also will be taken up Ehrlich's side chain theory of immunity, the different serum reactions including the complement fixation test (Wassermann test,) etc. The more important non-pathogenic and all of the important pathogenic bacteria will be studied, particularly in the laboratory course where the student will become familiar with the methods of preparing culture media, obtaining pure cultures, observing bacteria in the live state and in permanent stained specimens. The latter must be drawn and described. Such tests as the Widal test, the Wasserman test, etc., will be demonstrated and practiced by the student.

This course also includes the study of the microscopic diagnosis of rabies and of the most important microbic tropical diseases and of such protozoa as plasmodium malariae, amoeba histolytica, trypanosoma, the Donovan-Leishman bodies, piroplasma, sarcosproidia, etc.

General and Special Pathology.

Second year: First Term, General Pathology.
Two lectures per week—(30 hours.)
Recitation—1 hour per week—(15 hours.)
Laboratory: 2 periods per week at 3 hours—(90 hours.)
Second year: Second Term, Special Pathology.
Two lectures per week—(30 hours.)
Recitation—1 hour per week—(15 hours.)
Laboratory: 2 periods per week at 3 hours—(90 hours.)
Second year: Second Term.
Laboratory lectures and demonstrations on the intestinal parasites of man and the domestic animals.
One lecture per week—(15 hours.)

The subject of Pathology is taught by systematic didactic lectures, by recitations, autopsies and in the laboratory. The

lectures will cover the whole domain of general and special pathology and they will be illustrated by means of post-mortem specimens prepared by the Kaiserling method, microscopic sections and lantern slides projected on the screen. The laboratory course in pathology is given by the professor and his assistants in connection with and following the lectures and demonstrations. Particular stress is laid upon the laboratory course in general pathology, which necessarily must form the foundation for all studies in histo-pathology. No student can ever expect to acquire any degree of skill in microscopic pathologic diagnosis unless he masters general pathologic histology. Hence the students will be required to stain and mount a complete set of 100 or more sections representing such subjects in general pathology as disturbances of circulation, thrombosis and embolism, edema, hemorrhage, necrosis, degenerative cell changes, gangrene, cloudy swelling, fatty infiltration and degeneration, fat necrosis, hyaline degenerations, cornification, petrification, ossification, pathologic pigmentation, regeneration, atrophy and hypertrophy, inflammation acute, subacute and chronic. The infectious granulomata like tuberculosis, syphilis, actinomycosis, glanders, botryomycosis, blastomycosis and finally tumors, benign and malignant, connective tissue—epithelial and mixed neoplasms will be thoroughly studied in sections. The student will be required to draw and describe each section mounted, his collection of sections and his drawings and descriptions will form part of his record and grade in pathology.

Special pathology will likewise be studied in the laboratory and the students will be required to prepare, draw and describe the sections.

The students will also be familiarized with the common methods of fixing, embedding and sectioning pathologic material, the use of the microtome, etc.

Intestinal parasites of man and the domestic animals. This subject will be taken up in laboratory lectures and demonstrations during the sophomore year in the second semester.

Autopsies. Post-mortems are held at the Cook County Hospital by the head of the department who is one of the pathologists of this institution. Each student must attend at least thirty autopsies and he must furnish at the end of his junior year at least 30 complete post mortem protocols of autopsies which he has attended. Pathologic material will be collected at the autopsies and will be worked up in the labora-

tory and studied by the students. A limited number of students will be permitted to attend autopsies held by the head of the department and his assistants in other hospitals.

Hygiene and Sanitary Science.

The course in Hygiene and Sanitary Science will be given by Associate Professor Lederer. It will consist in lecture work and practical demonstrations. The subjects covered will be on the hygiene of the principal foods such as meat, milk, vegetables, beverages, on food preservation, adulteration, on air, water, sewage and their relation to disease, on ventilation, disposal of garbage, disinfection, occupational diseases, vital statistics, personal hygiene, etc. Excursions will be arranged to places of interest in connection with the didactic work.

Research Work in the Department of Pathology, Bacteriology and Hygiene.

A limited number of advanced students, who have shown special aptitude will be encouraged to pursue research work. This will be conducted under the direction of the head of the department in the *Lorimer Foundation St. Rita's Research Laboratory* recently installed on the second floor of the new wing of the College Building. It is primarily desirable that most of the research work undertaken in this laboratory be along the lines of studies in tuberculosis, but the experimental investigation of other pathologic and bacteriologic problems may exceptionally be permitted.

Journals kept in the Department of Bacteriology, Pathology and Hygiene:

Annales de l'Institute Pasteur.
Archiv f. Pathol. Anatomie u. Physiol. (Virchows Archiv.)
Archives de Medecine Experimentale.
Beitraege zur Pathol. Anatomie u. Allgem. Pathol. (Zieglers Beitr.)
Ergebnisse der Allgem. Pathol.
Bulletin Johns Hopkins Hospital.
Journal Experim. Medic.
Journal Infectious Diseases.
Journal Pathology and Bacteriolgy.
Zeitschrift fuer Immunitaetsf. (Originale.)
Zeitschrift fuer Immunitaetsf. (Referate.)
Zeitschrift f. Infektionskrankheiten.
Zentralblatt f. Allgem, Pathol.

Zentralblatt f. Bacteriologie.
Journal of Medical Research.
Verhandl. d. Deutsche Pathol. Gesellschaft.
Frankfurter Zeitschrift f. Pathologie.
Journal of Comparative Pathology.
Philippine Journal of Science.
Revue de la Tuberculose.
Zeitschrift f. Tuberkulose.

DEPARTMENT OF THERAPEUTICS AND PHARMACOLOGY.

Charles Henderson Miller, M. D.
Head of Department.
Elmer Holmes Flinn, M. D.
Richard Jay Lambert, Ph. G., M. D.
Leo Steiner, M. D.

The Department is organized and equipped for teaching the subject in accordance with the latest scientific conception of laboratory instruction.

The Materia Medica Laboratory work comprises a critical study of crude drugs; preparation of an individual materia medica cabinet of thirty-six specimens; a comprehensive synopsis of essential facts relating to all important drugs by each sudent; manufacture by the student of representative preparations under instruction.

The experimental study of the action of medicines is undertaken in a laboratory equipped with all essentials, including kymographic tracings of the influence of the more important drugs.

The didactic work includes lectures and recitations in equal numbers. In the Freshman year Materia Medica is taught by one lecture and one recitation a week. 30 hours. In the Sophomore year by one lecture and one recitation a week. 30 hours. In the Junior year the work in Therapeutics consists of a critical study of the physiological action of medicines, tracing out their specific influences upon the various corporeal systems. The therapeutic indications based upon the physiological action follow as a natural process of reasoning. The technical methods are exemplified by the writing of extemporaneous prescriptions suitable for a large number of hypothetical cases. These prescriptions are revised by the instructors and returned with comments to the students.

The course is so graded that the student passes from the simple study of the properties of medicines to the knowledge of their actions, and thence to the knowledge of their indications in combatting diseased conditions.

The course for Juniors includes one recitation and one lecture a week, (60 hours,) and two hours a week of laboratory work (60 hours.)

DEPARTMENT OF MEDICINE.

Nathaniel Abraham Graves, A. B., M. D., Head of the Department.
William John Pollock, B. S., M. D.
John Vosburg Stevens, M. D.
Arthur Henry Weis, M. D.
Roland Hodges Phillips, Ph. G., B. S., M. D.
Charles Albert Wade, M. D.
Oscar Brunk Funkhouser, M. D.
Albert Charles Apking, M. D.
Cleveland Shambaugh, M. D.
Herman Bohl, M. D.
Leo Steiner, M. D.
Leslie Francis MacDiarmid, M. D.
Daniel James Paradine, B. S., M. D.
James H. Moran, M. D.

Course I.

The subject of Medical and Clinical Diagnosis is taught in the Junior year. The students will be required to make examinations of the urine, sputa, stomach contents, and make blood counts on all clinical material which requires such examinations, thus making them proficient in the work. The report of such examination is to be filed with the history of the case for record and as an aid to the clinical instructor. The laboratory work will be supplemented with lectures and quiz work on the subjects taught under this heading. An average of four hours per week will be required for this course. 120 hours.

Course II.

This course will be on the important subject of Diseases of Children. The subject will be taught to the Juniors by recitations and clinics three hours per week. A thorough

course on infant feeding has been planned, including the artificial foods and their respective values and the modifications of foods. Lectures and quizzes on all the diseases of infancy and childhood will be a regular part of this course and the abundant clinical material at our free clinic will give ample opportunity for the student to become familiar with the clinical forms of the diseases and watch the results of careful medication. 90 hours.

Course III.

General Medicine: This course has been very carefully graded and is given to the Junior and Senior students.

We fully realize that after students have received instruction in the fundamental branches, that this is their most important study, for when they begin actual practice they will see and treat more cases in general medicine than in all the other subjects put together; therefore, we aim to make the instruction in this branch so thorough that when the student has finished the course he will be able to diagnose and treat intelligently any of the diseases in general medical practice.

It is our aim to give the students confidence in medicine, and to drill them so thoroughly in the application of remedies to certain definite diseased conditions that they may get the best possible results from the use of such remedies.

In the Junior year we are allotted eight hours per week for this subject and the course consists of lectures, recitations and clinics, particularly of the class of cases that are covered in the recitation work, so that each disease, as far as possible, is illustrated in this manner. 240 hours.

In the Senior year we also have eight hours per week devoted to general medicine and in this year of the work it is our aim to teach everything that is practical in general medicine, so that when the student leaves the college he will go with that confidence in medicine that he will apply it successfully and he will go with the idea that he must study each individual case and apply his remedies according to the conditions found present. 240 hours.

The Senior class will be required to attend clinics at Jefferson Park Hospital, Cook County Hospital and other hospitals which may be arranged for, and under the direction of the instructor examine, diagnose and prescribe for the clinic patient. This will give them instruction in obtain-

ing the history of the case, physical examination, differential diagnosis, the application of remedies to the conditions found present and prescription writing.

We will endeavor as nearly as possible to arrange the lecture course so that we may get clinic cases to illustrate the work.

DEPARTMENT OF SURGERY.

JOHN DILL ROBERTSON, B. S., M. D., Head of Department.
AIME PAUL HEINECK, M. D.
WILLIAM BERINGER MARCUSSON, B. S., M. D.
ANTON THEODORE HARRIS HOLMBOE, M. D.
BENJAMIN HARRISON BREAKSTONE, B. S., M. D.
FRANK BYRNES, M. D.
HUGH NEIL MACKECHNIE, B. A., M. D., C. M.
THOMAS DOWNES LAFTRY, M. D.
WILLIAM BERNARD MCCAULEY, M. D.
GEORGE LUDWIG APFELBACH, M. D.
CHARLES WILLIAM CLARK, M. D.
JOHN JOSEPH MEANY, M. D.
ALBERT HOWARD CARTER, M. D.
ARTHUR EDISON GAMMAGE, M. D.
JOHN HAROLD EDGECOMB, M. D.
ANDREW COSMAS GARVY, M. D. JACK MOSES, M. D.

In this department everything pertaining to the Science and Art of Surgery is taught. The student begins his training in this department at the beginning of his second year. He is taught Asepsis and Antisepsis, the preparation of the patient for the operation, the preparation of the surgeon to do the operation, the sterilization of instruments, gowns, gauze dressings, the use of rubber gloves and all the small, but essential, details of modern surgery. 30 hours.

In the third year the work begun in the second is continued as follows:

Third Year.

1—Didactic Surgery, General and Special. Sections of the class meet three hours a week under each of the following: Professor MacKechnie and Assistant Professors Edgecomb and McCauley. 90 hours.

2—Surgical Pathology, two hours each week under Professor O'Connor. 60 hours.

3—Operative Surgery, cadaver and dog, laboratory, divided classes, three hours each week for four weeks under Professor Rankin and assistants. 12 hours.

4—Surgical Diagnosis, clinical, at Jefferson Park Hospital, two hours each week throughout the year under Professor Robertson and Assistant Professor Gammage. 60 hours.

5—Dispensary Clinic at Bennett Medical College, divided classes, five times a week for four weeks, daily between 2-3. 20 hours.

6—Surgical Clinics, divided classes, three hours each week for four weeks at each of the following hospitals: 90 hours.

Jefferson Park, Dr. Laftry, Dr. Gammage, Dr. Moses.
Rhodes Avenue, Dr. MacKechnie.
St. Anne's, Dr. Meany.
Columbia, Dr. O'Neill.
Lakeside, Dr. Johnstone.
Columbus, Dr. Byrnes.
Maimonides, Dr. Breakstone.
Cook County, Dr. Lewis.
Total 322 hours.

Fourth Year.

1—Surgical Clinic, two 2-hour periods each week at Jefferson Park Hospital, under Professor Robertson and Professor Heineck. 120 hours.

2—Surgical Clinic, two 1-hour periods each week at Jefferson Park Hospital, under Professor Marcusson and Professor Breakstone. 60 hours.

3—Surgical Clinic, one 2-hour period each week at Cook County Hospital, under Professor Lewis. 60 hours.

4—Clinical Lecture, one hour each week, Orthopedic Surgery, Professor Holmboe. 30 hours.

5—Clinical Lectures, two hours each, by Professor Robertson and Professor Byrnes. 60 hours.

Total 330 hours.

DEPARTMENT OF OBSTETRICS.

William Alexander Newman Dorland, A. M., M. D., Head of Department.

William Rittenhouse, M. D.
Mary Mulcahy, M. D.
Thomas Gale Wallin, M. D.

This course is conducted throughout the third and fourth

years. The instruction comprises lectures, recitations, demonstrations out-patient and hospital clinics and exercises with the mannikin.

Junior Year: The Physiology of Pregnancy, Labor and the Puerperium. Lectures two hours a week; recitations two hours a week. 120 hours.

Senior Year: The Pathology of Pregnancy Labor and the Puerperium. Lectures two hours a week; recitations two hours a week. 120 hours.

Clinics at the Jefferson Park hospital, and other hospitals on Midwifery; Clinics at patients' homes under charge of an instructor. An extra charge of ten dollars is made for this course.

Practical exercises on the obstetric mannikin; to the class in small sections.

Text-books: Dorland's Modern Obstetrics, Peterson's Obstetrics.

DEPARTMENT OF GYNECOLOGY.

Henry Foster Lewis, A. B. M. D., Head of Department.
Alfred de Roulet, M. S., M. D.
Stuart Johnstone, M. D.
Thomas Albert Carter, M. D.
Frances Helen Cook, M. D.
Arthur Caldwell Gillam, A. M., M. D.
Henry Randal Kenny, A. B., M. B., B. Ch., B. A. O.

This course is conducted throughout the third and fourth years. The instruction comprises lectures, recitations, demonstrations, out-patient and hospital clinics.

Junior Year: Lectures and recitations on the Anatomy and Physiology of the Female Genital Organs; 60 hours. Methods of Gynecological Examination and Diagnosis; Functional Gynecological Disorders.

Clinics at the Jefferson Park and other hospitals on Diseases of Women. Dispensary Clinics daily.

Senior Year: Lectures and recitations on the Pathology and Treatment of the Female Genital Organs. 60 hours.

Clinics at the Jefferson Park, Cook County Hospital and other hospitals on Diseases of Women. Clinics at the College Dispensary and other dispensaries on Diseases of Women.

Personal attendance at the wards of the Jefferson Park

Hospital and other affiliated hospitals, where the students in rotation will be required to assist in the diagonsis and treatment of patients under the personal charge of members of the faculty. Text-book: Crossen's Diseases of Women.

DEPARTMENT OF OPHTHALMOLOGY.

Jacob Franklin Burkholder, M. D., Head of the Department.
Douglas Amos Payne, M. D.
Elzear LaMothe, M. D.
Carl Wagner, M. D.
Eva Hansen, M. D.

The work in this department is designed to meet the requirements of those intending to become general practitioners of medicine. The instruction is thoroughly practical and consists of the following courses:

Course I.

JUNIOR YEAR.

The work in this course will consist largely of laboratory exercises and clinical demonstrations. The class will be arranged in small groups of students in order that each may have personal instruction.

The preliminary work will embrace the study of the gross anatomy of the eye and its appendages. Bullocks' eyes are frozen and cut, and then allowed to thaw under water, insuring a minimum of disturbance in structural relationships. Sections through the equatorial and sagittal meridians are drawn and studied. This exercise will give the student a knowledge of the anatomy of the eyeball in these dimensions.

The study of the gross structures of the eye will be followed by histological demonstrations and drawing. The minute anatomy of the important tissues will be studied with reference to physiology, pathology and etiology.

The student will be initiated, during this course, into the value of the ophthalmoscope to the general practitioner. Exercises will be carried on by means of the schematic eye.

Attention will be given to the various ophthalmic manipulations, as oblique illumination, everting the lids, removal of foreign bodies from beneath the lid, etc.

Elementary refraction will be considered, and its correlation to local and general symptoms explained. Once a week. 30 hours.

Text-book: May.

Course II.

SENIOR YEAR.

Systematic lectures will be given on the commoner diseases of the eye and lids. Special attention will be given to the differential diagnosis of ocular diseases.

Consideration will be given to the prevention as well as the treatment of the serious conjunctival inflamations.

The study with the ophthalmoscope will be continued in this course.

The relationship of the eye to general diseases and the far-reaching influences of errors in refraction and their complicated reflexes will be explained.

The minor surgical operations will be demonstrated on the cadaver. Once a week. 30 hours.

Text-books: Weeks, Fuchs, Parson.

DEPARTMENT OF RHINO-OTO-LARYNGOLOGY.

ULYSSES JOSHUA GRIM, M. D., Head of Department
WILLIAM ALLEN PORTER, M. D.

In the work of this department clinical teaching will be the special feature.

JUNIOR YEAR.

Lecture once a week. 30 hours.

Clinic, one hour a week to class in sections. 30 hours.

Minor practice to sections.

SENIOR YEAR.

Clinic once a week at college. 30 hours.

Clinic twice a week in sections at Illinois Charitable Eye and Ear Infirmary. 60 hours.

Practical course in ear and nose surgery on cadavers and animals to advanced students. Elective.

Text-books: Ballinger, St. Clair Thompson, Wendell Phillips, Gleason.

DEPARTMENT OF DERMATOLOGY AND SYPHILOGRAPHY.

DAVID LIEBERTHAL, M. D., Head of the Department.
KASIMIR AMBROSE ZURAWSKI, M. D.

Junior Course: Weekly lecture. First month of the first term. Introduction into dermatology—physiology of the skin—demonstration of histology by projection on screen. Didactic lectures thereafter: Special dermatology illustrated by plates, photographs and by demonstration of patients. 30 hours.

Senior Course: First term: Weekly lecture on syphilis of the skin and the mucous membranes with demonstration of spirochetae by dark-field illumination, and by stained specimens. Demonstration of plates and patients. 15 hours.

Second term: Lectures on special dermatology, illustrated by plates, photographs and patients. 15 hours.

During both terms bi-weekly clinical lectures at the College or at hospitals to classes of not more than twenty students, the list changing monthly in rotation. 30 hours.

Text-books: Stelwagon, Morris, Jackson, Taylor, Keyes.

DEPARTMENT OF NERVOUS AND MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

EDGAR MEAD READING, A. M., M. D., Head of the Department.
HENRY GEORGE WILLIAM REINHARDT, M. D.
ARTHUR E. GAMMAGE, LL. B.
THOMAS HOGAN, LL. B.
JOHN FRANCIS TYRRELL, A. B., LL. B.

Course I.

The diseases of the brain and nervous system are taught to the Senior class by lectures, recitations and clinics twice a week. 60 hours.

Neurological Anatomy is taught in a special course in the anatomical department.

Course II.

This course is taught to the Senior class and deals with the legal subjects of interest to the medical graduate. The subjects of malpractice, expert testimony, the legal aspects of

impotency, sterility, rape, pregnancy, legitimacy, infanticide, wounds, poisons, feigned disease and survivorship are thoroughly discussed. 30 hours.

Course III.

Neurology.

The work given in this section will be under the charge of Dr. J. F. Burkholder, and will be entirely devoted to the study of the physiological anatomy of the central nervous system and the neuron. The gross anatomy will be largely a review of the laboratory exercises of the preceding year, with special demonstrations on the human encephalon.

The study of the neuron body will receive particular attention, for the reason that in the brain, as in other tissues, the cell is the anatomical as well as the physiological unit. Slides of nerve tissue, stained by the various processes, as Nissl, Golgi and Pal-Weigart, will be supplied to the student for study and drawing. This will give him a working knowledge of the morphology and internal architecture of the neuron body that can be acquired in no other way. Professor Burkholder and Assistants. 40 hours.

Text-book: Reading's Lecture Notes. Allchin.

DEPARTMENT OF GENITO-URINARY DISEASES.

Felipp Kreissl, M. D., Head of the Department.
L. J. Day, M. D.

The work of this course is carried on by recitations and clinics and all of the diseases of the Genito-urinary system are studied in the senior year. 30 hours.

The clinical work is conducted in the college building every afternoon between 2 and 3 p. m., except Sundays. Also at the Jefferson Park and other hospitals, where there is an abundance of clinical material. 30 hours.

The student is taught the intravenous method of Salvarsan treatment, the use of the urethroscope, cystoscope and other instruments employed in this class of cases for diagnostic and therapeutic purposes. Each student is also required to personally examine and treat the patients under the supervision of the teacher.

DEPARTMENT OF PHYSIOLOGIC THERAPEUTICS.

NOBLE MURRAY EBERHART, A. M., M. S., M. D.,
Head of Department.
GORDON GRANGER BURDICK, M. D.

Realizing the importance of the application of therapeutic agents outside of drugs, the College has established a Department of Physiologic Therapeutics, which will include instruction in the use of all electrotherapeutic measures (including galvanism, faradism, high frequency, X-ray, etc.), and will also include vibration, phototherapy, hydrotherapy, psychotherapy, serotherapy and other non-drug methods.

Instruction in the X-ray will be supplemented by practical work in the Jefferson Park Hospital, where students will be taught the technique of making and interpreting X-ray pictures, under the supervision of the Head of the Department. 30 hours.

DISPENSARY CLINICS.

The clinic is divided into ten departments for the study of the various diseases. Every student is assigned to a given room for a stated period, when he is transferred to another, and in that way each must devote a certain portion of his time to each clinic. The members of the clinical staff are in attendance from 2 to 3 p. m., daily, throughout the year, except Sundays and holidays.

The work is so arranged as to give every student the best possible advantage in making diagnoses, outlining treatment, which includes a review in prescription writing and the physiological action of drugs. An attending physician in each room assists the student, confirming his diagnosis, writing the prescription, and quizzing over the different points of interest with each patient.

The clinical laboratory is also arranged in this department, where students are assigned to a period of laboratory work. In this work they get the same experience as if in a private laboratory in their own office, making examinations of specimens which are collected throughout the clinic.

Students who fall short in their attendance in the regular clinic hours during the year must attend clinical work during the summer.

Students must conduct themselves in a decorous manner

in the clinic rooms, and patients must be treated with the same consideration as in a private office.

Students are not allowed in any clinic room but that to which they are assigned, except by permission of the instructor to whom they are assigned, nor can they get credit for attendance unless they are actually present at roll call and remain in attendance.

All students entering the clinic must provide themselves with the following instruments: Clinical thermometer, stethoscope, head mirror, ear speculum, ear syringe, nasal speculum, tongue depressor, laryngoscopic mirrors, probes and applicators.

Students not providing themselves with these instruments of diagnosis will not be permitted to attend.

JOHN VOSBURGH STEVENS, M. D., Superintendent.

GENERAL INFORMATION.

The Bennett Medical College "Year Book" is published during each school year, and contains valuable data concerning the college, present school body and Alumni. It is handsomely printed and neatly bound and sells for $2.00.

The Academy (St. Ignatius College) is located at 1076 West Twelfth St., corner 12th St. and Blue Island Avenue. To reach the College from Loop District take either the 12th Street surface car or Blue Island Avenue surface car.

The Loyola University is located on the North Side of Chicago, a campus of 29 acres extending from Devon Avenue to the Lake. An Evanston car on the Northwestern Elevated Railway, will land you at the entrance to the grounds.

Students who desire to combine a general course with their professional studies and secure a B. S. and M. D. degree, may accomplish this purpose by pursuing work at the Loyola University in connection with their four years' course in Bennett Medical College.

ALUMNI ASSOCIATION.

Officers:

ARTHUR EDISON GAMMAGE, M. D., President, Chicago.

ELEANOR FISH, M. D., Secretary, Chicago.

The annual meeting of the Alumni Association will be held at the College Building, corner of Ada and Fulton Streets, June 14th, 1914, at 10 a. m.

Each year shows a growth of interest in this annual meet. ing. Two days of exercises and history by members of the Alumni, Reception and Banquet, Special Clinics, visiting points of interest in the city, makes up a program intermingled with features of both pleasure and profit.

Every member of the Association is urgently requested to respond to the invitation that will be mailed him, and to become an active factor in the growth of the University. The membership of the Alumni Association includes all the graduates of the Bennett Medical College, Illinois Medical College, Reliance Medical College and Dearborn Medical College.

The total number of Alumni of these schools is 2,700 making one of the largest Medical Alumni Associations in Chicago.

Bennett Medical College maintains a Bureau of Information for its graduates. Among other things, hospital positions, new openings for practice, opportunities for locum tenens work, etc., are recorded.

It is very important that the exact address of each alumnus be on file in the office. Furthermore, at this time request is made of each alumnus that he keep the office informed as to his movements and his progress in professional work, including appointments, publications, or honorary recognitions which may come to him. It is desired to keep on file all data concerning our alumni for historical purposes.

All correspondence relative to Medical Alumni Association matter should be addressed to Eleanor Fish, M. D., 919 Winthrop Court, Chicago, Ill.

COMBINED COLLEGIATE AND MEDICAL COURSE.

The college of Liberal Arts in the Loyola University, with which Bennett Medical College is affiliated, offers to students through its Preparatory Department a course especially arranged to fit the need of students preparing to take the Medical Course.

It is recommended that all students who contemplate entering Bennett Medical College take the Preparatory Course. Those who have not completed the four years of High School work should communicate with the Dean of the Institution as early as possible.

The Preparatory Work consists of the following studies:

Each candidate is to show that he is entitled to receive a total of thirty points.

Latin Grammar and Latin Prose Composition, required 2 points.

English Grammar and Rhetoric, required 4 points.

Algebra, required 2 points.

Plane Geometry, required 2 points.

Physics, required 2 points.

History, including Political Economy and Civics, required 3 points.

Total points required, fourteen. Sixteen more points must be earned by a successful examination in a sufficient number of the following subjects: English Language and Literature, 4; Latin to a maximum of six points besides the required two points; German, French, Spanish and Greek, minimum for each, two points, maximum, eight; Solid Geometry, one; Trigonometry, one; Biology, two; Zoology, one; Botany, one; Chemistry, one; Physical Geography, one; Geology, one; Physiology and Hygiene, one; Astronomy, one; Drawing, one; making in all thirty points.

Everything included in this Preparatory Medical Course and in the First Year college course, is taught with the idea of thoroughly fitting the student for the study of Medicine, and no time is lost in those subjects which do not have a direct bearing upon this study.

The avowed policy of the University in all its departments is to encourage in every way the gaining of a broad general education as a foundation for the work of a profession.

In no profession is there greater need for such education than in medicine. As a preliminary step in this direction the Collegiate and Medical Departments offer an optional six-year course, including two years of collegiate work in arts and sciences, followed by two years of study in the fundamental branches of medicine. Upon the completion of the following two years of clinical study, that is, at the end of the combined six-year College and medical course, the degrees of Bachelor of Science (B. S.) and Doctor of Medicine (M. D.) are conferred.

As an entrance requirement, the student must have completed the Academy or High School course, or its equivalent.

GRADUATED ON SEPT. 26, 1912.

Brown, Aubrey Kenna
Brunswick, Edwin Lewis
Hinn, Otto William
Horn, Max A.
Houston, Ulysses Lincoln
Kirmse, Alvin Theron
Swarz, George
Walker, Benjamin Ulysses

GRADUATED JANUARY 20, 1913.

Androp, Serge
Christenson, Emil Martinus
Cleary, Joseph Patrick
Collins, Samuel Jones Blanchflower
Connolly, Thomas James
Crapple, William
Fisk, Roy Earl
Gaines, Mark Cyrus
Hardeman, George Washington
Hoesley, Henry Franklin
Kline, Roy William
Legris, Louis Joseph Agrapit
Schlack, Otto Charles

GRADUATED JUNE 20, 1913.

Ahner, Charles Louis
Atherton, Mary Jean
Beaudette, Joseph Wilbur
Bryson, Edmond Jones
Carlsen, Haldor
Carneal, Thomas Edgar
Corman, Verne Martin
Cross, Clara Glines
Davis, Arthur Lee
Ellis, Lewis Charles
Freeman, Horatio Putnam
Fulliam, Edmond Bland Ballard
Gates, George Francis
Gehl, William Henry
Gillespie, Orville Floyd
Hearn, Harry Elton
Hill, Harry Alonzo Kellor
Hooper, Clara Addleman, A. B.
Hundtermark, Albert Herman
Hutchinson, Roy Matthew
Juhl, Erik, B. S.
Kail, John William
Kellar, Vincent F.
Kersten, Marie E.
Lynch, Charles F.
Magill, Ansel Oswald
Magill, Samuel Rufus
Metheny, Samuel Earl
Mulcahy, Mary A. B.
Neiwig, Alfred George.
Neumeyer, William H.
Phillips, Fred Monroe
Potter, Ralph Edgar
Parsonnet, Aaron
Reed, Russell Soule
Rodaway, Roy Thomas
Schott, Otto Julius
Simerall, Harry Alex.
Skleba, Leonard Frederick
Stoycheff, Alexander Braganoff
Tietze, Herman Christian
Vachout, Marie A.
Wallin, Thomas Gale
Wehrle, Louis Gilbert

MATRICULATES FOR THE SESSION OF 1912-1913.

Abbreviations for periods of attendance:
No mark—Entered September, 1912.
Letter S—Entered June, ——.
Letter W—Entered January, ——.

FRESHMAN CLASS.

ALDEN, JOHN FREDOLPH
BENGOA, JOSE THOMAS
BENKENDORF, BERNARD
BRYAN, ALANSON LEROY
BOEHM, ROBERT GUSTAV
BYRNE, MAURICE WILLIAM K.
BOYER, CARL ELMER
BLANCHETT, RAYMOND J.
BURKE, ALEXANDER W.
BRANDON, WALTER LEE
BLACK, BYRON BAYARD
BRONSTEIN, SAMUEL O.
BARTON, W. C.
CHITTY, ROBERT L.
CICOTTE, FREDERICK J.
CRAIG, GLEN E.
CLARK, ROBERT
DAVIDSON, FINIS F.
DIXON, WILLIS L.
DUNHAM, ROYAL W.
DITTMORE, GEORGE W.
DUBEAU, EDWARD WILLIAM
DEBECK, CALVIN MORGAN
DE HES, MAX
ETERNO, JAMES
FALK, HERMAN W.
FELDMAN, WILLIAM
FELDMAN, MAX
FELDMAN, BENJAMIN
FOUGERAT, ROBERT C. FRONTERO
FELDOTT, E. A.
GALLOWAY, CHARLES E.
GBURCZYK, FRANK H.
GEORGE, RAYMOND H.
GLOVER, CHARLES W.
GRAVES, NATHANIEL VAN
GUNDRUM, MARK DUANE
GUY, EDWARD LEWIS
HERSCHEL, GEORGE E.
HUDDELSTON, WARREN A.
HIGHSMITH, CHARLES OTTO
HIGHSMITH, L. B.
HANEY, IRL S.
HARRELL, C. F., W-13
HENNESSEY, RUSSELL
HEILIGENSTEIN, RUDOLPH, W-13
HRADMANSKY, CHARLES, W-13
HARRIS, CLARENCE P., W-13
HOLLIS, J. E., W-13
HOLLIS, J. B., W-13
JACKSON, LEWIS
JOHNSON, JOSEPH A.
JONIKYS, J. J.
KRUSE, HENRY
KATZOWSKY, LEWIS JOSEPH
KARAL, ANTHONY J.
KELLY, RAYMOND MARTIN
KIRKPATRICK, R. R. W-13
KLEIN, GEORGE A.
KALISZ, WALTER J.
KEGEL, A. H.
LINDHOLM, HENNING O.
LITTLE, HARVEY THOMAS
LOPEZ, ALEJANDRO O.
LANGFORD, EARL K.
MCGUIRE, T. F.
MARIANI, MIGUEL A.
MCSPARIN, JAMES M.
METHENY, HARRY BOHN
MOCK, FRANK XAVIER
MOHR, WALTER
MCNERTNEY, ARTHUR
MALONE, LEO VINCENT, W-13
MODERT, ALSON W., W-13
MEYER, ELMER H.
MAYER, EMIL V., W-13
MAURER, ROY FRANK, S-12
NEILSON, CARL MARTIN
NICHOLSON, NILS H., W-13
O'FARRELL, PATRICK
O'GRADY, GEORGE E., W-13
OMENSKY, DAVID, W-13
ORTIZ, JAMES B. NOGUEROS
OTTOW, ALBERT
OVERHOLZER, WALTER C.
PASSARELLO, FRANK A.

Pellettiere, John
Pendergraft, Roy O., W-13
Pickett, William J.
Provost, Benjamin W., W-13
Read, William Roscoe
Restos, Yugo Hernandez
Rivera, Virgilio Aponte
Salinas, Miguel S.
Scholl, Eleanor Cushing
Showalter, Irene Helen
Sodora, Anthony, W-13
Soldinger, Joseph
Stepanski, Helen Fadora
Stokes, Bessie
Swanson, Charles A.
Szubizyuski, Norbert
Tatarsky, Solomon W-13
Trowbridge, C. W., W-13
Van Arsdell, Ernest P.
Vertin, Joseph David
Vivo, Jorge S.
Weber, John Peter

SPECIALS.

Bossard, S. LeRoy
Chiasson, J. P.
Chiasson, M. J.
Chiasson, Timothy
Graulau, Luis M.
Heda, Frank
Hubbard, S. M.
Jordan, Caesar
Milliken, Allan P.
Miczoll, Konstantin P.
Kleinwachter, A.

SOPHOMORE CLASS.

Apostilides, Emanuel, S-12
Asche, Walter F.
Auwers, Fred J.
Auwers, Joseph T., W-13
Arnold, Ferris Lyle
Amoros, Gabriel
Bedessen, Phillip M.
Baker, Andrew P.
Bennewitz, Anthony H.
Blake, George James, W-13
Brust, Edward F.
Bucher, Clarence S., W-13
Burke, J. W., W-13
Brown, Otto R.
Carstens, Ernest H.
Chiasson, P. N.
Conn, Hugh I.
Del Valle, Manuel L.
Donasier, John J.
Donovan, Michael J.
Dornbusch, Franklin H.
Dubinsky, Thomas J.
Duffy, Mark M.
Dow, Julian
Dougherty, Xenophy Best
Dittmore, Joseph A.
Elmer, Raymond F.
Fahrner, Arthur H.
Ferguson, Janet E., W-13
Fisher, Thomas G.
Fleischman, Joseph A.
Feser, Raymond Leonard
Garrison, Herbert
Gunderson, Elmer A.
Hehir, Joseph
Haworth, Dale T., W-13
Hendrickson, Carl J., S-12
Holden, Alvin A.
Horn, Clint
Harris, Elijah G., W-13
Huber, Gale W.
Jenks, Isaac C.
Johnson, Joseph A.
Jackson, Edward, W-13
Kell, Chance
Kelly, Martin J.
Kietzer, Edmund E.
Koch, Oswin F.
Konle, Ralph A.
Knochel, Joseph M.
Kreml, Otto A.
Krisher, B. Franklin
Lippitt, Samuel H.
Lownick, Felix, W-13
Livingston, Clare Allen
Lindsey, Joseph H., W-13
Malloy, Francis F.
Mauricau, Van Buren
Miller, Joseph W.
Montford, Roy Malloy

Moses, Joseph, W-13
McChensy, D. H.
McQuaid, Arthur F.
Nauen, Charles O.
Nowicki, A. H.
Norris, Clarence O.
Oldfield, Raleigh E.
Oakes, Fred
Painter, John B.
Pearce, Franklin B.
Remington, Sheppard
Rice, Carroll W.
Rios, Ramon A.
Robertson, Ira B.
Ross, Joseph Clegg
Rey, H. K.
Robinson, Victor
Schaffner, N. C.
Schwartz, F. J.
Schuettler, Arthur F.
Sharp, Ara D.
Somers, Peter Arthur
Swanson, Harry F.
Sondell, Louis Carl, W-13
Schaffer, David N., W-13
Walsh, Thomas F.
Wolin, Benjamin M.
Wawrzynski, W. J.
Weber, Joseph C.
Walters, J. E., W-13
Worrell, Joel D.
Zak, Joseph J.
Zaremba, John Edward

SPECIALS.

Borchert, Herman F.
Carnall, Thomas C.
Gentry, Benjamin M.
Gonzales, Jose R.

JUNIOR CLASS.

Anguish, Eber, W-13
Barnes, John Nelson
Beltz, Andrew H.
Blomgren, Walter L.
Brieter, Martin H., W-13
Brown, James B., W-13
Byles, William J.
Bronfeld, Nathan
Bolden, Thomas Vincent
Cohen, Morris J.
Crow, Harry L.
Crescioni, D. A.
Carmichael, James F.
Conn, Earl G.
Clarke, John H.
Coleman, Charles E.
Curry, Arthur B.
Crowe, Vernon E.
Dahl, Elmer O.
Davis, Alfred T.
Defendini, Santos
Downing, Earl F.
Duffy, Frank F.
Dovre, Conrad M.
Eckwall, H. J.
Egan, T. Martin
Edmonson, June L.
Foulkes, William
Fisher, Mandel
Forbes, James F.
Foster, Robert L.
Frauer, Edgar A.
Friedman, Edward W.
Fudema, John J.
Fromm, August M.
Gieger, John W.
Gray, Edmund C.
Gray, Alfred N.
Glickson, Simon
Goldberg, Maurice J., W-13
Hartman, Minor Leroy
Harvey, Harold
Hirsch, Abraham
Honan, William Patrick
Houser, Harvey C.
Johnson, John P.
Johnson, Frank R.
Jones, Thomas Clarke
Jordan, Herbert L.
Klein, Samuel
Kelso, Robert D.
Hogan, Leo G.
Liebau, John
Leslie, James Frederick
Loewy, Joseph
Long, John W.

Livingston, Phillip, W-13
Massey, H. A.
Maguire, Franklin Thomas
Major, Wilfred A.
Marmor, Sam
Marzano, Vitantonia
Marzano, Vincenzo
Meads, Ezra L., W-13
Melnikoff, Louis R.
Merrill, Lewellen C., B. S., W-13
Miller, Fred McKay
McCleary, Edgar John
Monaco, Attillo
Moore, Harris C., W-13
Musselwhite, Brooks J.
McDonnell, Charles L.
McKenzie, Colin
Newman, Leon
Nolan, Eugene
Newman, Jefferson C., W-13
Patterson, Robert B.
Pechous, Bohumil E.
Peters, Roy E.
Phillips, William Edgar
Peterson, Peter G.
Pomeroy, Paul G.
Roan, Bert
Rongetti, Amante
Rose, William Henry, S-12
Reams, Amy E., W-13
Rathbun, Clarence A., W-13
Schallmo, Joseph, W-13
Stokke, A. M., W-13
Seigal, Morris, W-13
Sherman, Harry Harper
Skallerup, Walter M.
Stokes, Albert J., W-13
Skinsness, Casper C.
Thomas, George B.
Thornton, John W.
Urkov, Joe
Utley, R. E.
Victorine, Edward M.
Wolf, Benzoin
Walsh, J. J.
Walters, W. J.

SPECIAL.

Loyola, Jose A.

SENIOR CLASS.

Atherton, Mary Jean McL.
Ahner, Charles Louis
Abbs, Clarence Elbert
Beaudette, Joseph Wilbur
Bendick, John J.
Bridges, Benjamin L.
Bryson, Edmond Jones
Burns, John Robert
Caron, Adolph R.
Carlsen, Haldor
Carneal, Thomas E.
Christianson, Albert W.
Christianson, Henry
Collins, Samuel
Corman, Verne Martin
Cross, Clara B. Glines
Czarchouski, John
Davis, Arthur Lee
Devereux, Richard Leo
Ellis, Charles Lewis
Fulliam, Edmon B.
Freund, Emanuel Martin, W-13
Furlott, Francis Percival, W-13
Farina, Joseph
Freeman, Horatio P.
Gross, John William
Gehl, William Henry
Gates, George Francis
Gillespie, Orville F.
Gaines, Mark Cyrus
Hundertmark, Albert Herman
Hearn, Harry E.
Hutchinson, Roy Matthew
Hardeman, George W.
Hill, Harry Alonzo Keller
Hook, M. D., C. A.
Hooper, Clara A.
Hertel, Paul
Johnson, Andrew Ross
Johnson, Fred Ambrose, W-13
Juhl, Erik, B. S.
Kersten, Marie
Keller, Vincent F.
Kail, John W.
Kopecky, Louis A.
Legris, Louis J. A.

Lichner, Samuel
Lynch, Charles F.
McCarter, Alvin J.
Mulcahy, Mary Agnes
Middleton, Emanuel
Metheny, Earl S.
McElroy, James M.
Magill, Ansel Oswald, B. S.
Magill, Samuel Rufus
McKeller, Malcolm
Mann, Sidney L.
Murray, Uriah N.
Neumeyer, William H.
Nicolai, Paul
Niewig, George A.
Northcross, Daisy L.
O'Hearn, Maurice C.
Pisani, Vito Vettor
Proulx, Theophile
Potter, Ralph Edgar
Parsonnet, Aaron
Phillips, Fred Monroe
Rawitz, Samuel B.
Reed, Russell S.
Rodaway, Roy Thomas
Rennie, Thomas W.
Rispin, Edward B.
Rabbins, Maurice J.
Sample, William Rano
Simrell, Harry Alex
Sloan, Edward I.
Salzberg, Benjamin A., W13
Skleba, Leonard F.
Stoycheff, Alexander D.
Schott, Otto Julius
Tietze, Herman C.
Vachout, Marie A.
Wieczorek, Ladislaus P.
Wehrle, Louis Gilbert, B. S.
Wallin, Thomas G., B. S.
Weinberg, Harold N.

SPECIALS.

Boyd, Horace Milton
Day, Walter A.
McAvoy, William T.
Donnelly, Orlando A. R.
Voss, Fritz

ATHLETICS.

Foot-Ball, 1913-1914.

Coach—Dr. W. J. Schneider.

Captain—August M. Fromm.

The Loyola foot-ball team was organized in 1910 and succeeded in two years in developing into a team which has already created a favorable impression in athletics.

The practice work and at-home games will begin October 1, 1913, on the Loyola University campus, Devon Avenue and Sheridan Road.

Base-Ball.

Manager—B. E. Pechous.

The Loyola base-ball team begins activities in April and closes the season early in June. Fourteen games were played in the spring of 1913, with the leading college teams of Chicago. The games are played on the home grounds, Devon Avenue and Sheridan Road.

Athletic Fee.

Students from all departments join the Athletic Association sustained by Loyola University. The Annual dues are $2.00. Membership tickets are issued which admits the holder to all functions given by the Athletic Association during school year, as well as free admission to all games played on the home grounds. Athletics is an interesting part of student life, and the membership fee helps to sustain a loyal, enthusiastic and winning team. New students desiring to qualify for 1913-1914 team should make application to O. T. Owen, Business Manager, 1358-1362 Fulton Street, Chicago.

Loyola University

Department of
Law

1914

Ashland Block, Clark and Randolph Streets
Address: The Dean or Secretary
Phone Central 1671

Faculty of the Law Department

Rev. JOHN L. MATHERY, S. J.,
President of the University.

Rev. HENRY S. SPALDING, S. J.,
Regent and Director of Graduate Schools.

Hon. WILLIAM DILLON, LL. D.,
Dean of the Law Faculty.
Constitutional Law.—Conflict of Laws.

ARNOLD D. McMAHON, A.M., LL. B.,
Secretary of the Law Faculty.
The Law of Wills and Administration.
The Law of Property, A.

Michael J. Ahern, A. M., LL. B.,
Common Law Pleading.

Bernard J. Baumer, A. B., LL. B.,
The Law of Property, B.—Abstracting and Conveyancing.

J. Ambrose Gearon, A. B., LL. B.,
The Law of Corporations.

Hon. Michael F. Girten, LL. B.,
The Law of Persons and Domestic Relations.

Joseph A. Graber, A. M., LL. B.,
The Law of Suretyship.—Partnership.

James Hartnett, Esq.,
Lecturer on Constitutional and Elementary Law.

Charles Hughes, Esq.
The Law of Crimes and Criminal Procedure.

Hon. Thomas B. Lantry, LL. B.,
Judge of Practice Court.

HON. JOHN P. McGOORTY. LL. B.,
Lecturer on the Law of Torts.

WILLIAM C. McKENNA, A. M., LL. B.,
The Law of Agency.

GEORGE V. McINTYRE, LL. B.,
The Law of Evidence—Equity Jurisprudence.

GEORGE F. MULLIGAN, A. M., LL. B.,
Practice and Procedure.

REV. PATRICK A. MULLINS, S. J.,
Lecturer on Legal and Social Ethics.

THOMAS D. NASH, A. M., LL. B.,
The Law of Bailments.

PATRICK H. O'DONNELL, LL. D.,
Law of Negotiable Instruments.

REV. FREDERIC SIEDENBERG, S. J.,
Lecturer on Sociology.

HON. JOHN J. SULLIVAN, LL. B.,
Elementary Law.

JOSEPH J. THOMPSON, LL. B.,
Law of Insurance.
Sale of Personalty.

PAYTON J. TUOHY, A. M., LL. B.,
The Law of Contracts.

ELIJAH N. ZOLINE, A. B., LL. B.,
Lecturer on Equity, Jurisprudence and Practice.

FOUNDATION.

The Law Department of Loyola University was established in September, 1908. From the beginning its success has been pronounced, and it now stands among the leading night law schools of the country. It occupies a commodious and quiet suite in the Ashland Block, Clark and Randolph Streets, in the center of Chicago's business district. The regular session for the year 1914-1915 will open on September 14, 1914, at 6:30 p. m.

ADVANTAGES.

Class sessions of the Department are held in the evening from 6:30 to 9:00 o'clock, thus making it possible for young men employed in law offices to unite the advantages of a regular, scientific course in the law under experienced instructors with the practical training afforded by their daily work. This arrangement also enables those engaged in clerical and commercial positions to give their attention to their duties and at the same time prepare themselves for the practice of the profession.

The location of the Department in Chicago, the commercial and financial center of the West, presents opportunities which are unequaled elsewhere to those who must support themselves whilst pursuing their legal studies. The officers of the Department make every effort to aid its students to secure desirable employment when seasonable application for such assistance is made. Many requests for clerks are received from the leading law firms of Chicago, and the Secretary is frequently able to place students desiring such positions.

Chicago also affords innumerable advantages for the study of law in all its branches: Varied and important litigation is here being constantly carried on. Sessions of the Courts of Cook County, the Municipal Court of Chicago, and the Federal Courts are held daily thus affording to those who have leisure to attend ample opportunity of learning the trial methods of the leading lawyers at the Bar of Illinois. The library facilities of Chicago, open to students in the professions, are unsurpassed, and in addition, the Department has a library suitable for study and research at the disposal of its students.

The Department enjoys, moreover, the distinction of being the only evening law school in Chicago maintained and supported by a University. Worthy young men, whose circumstances do not permit them to give the entire day to the study of law, may here secure their professional training and receive their law degrees from a University of recognized standing.

Students in the Law Department are admitted to the musical and literary societies, to the gymnasium and athletic clubs of the University, and to the columns of its Journal on the same basis as students in the other Departments. Thus there is fostered among the law students a spirit productive of pride in their work, and an incentive is given to better and more sustained effort. This bond of intellectual fellowship will present ideals of high achievement utterly absent in an unaffiliated law school.

AIM—METHOD OF INSTRUCTION.

The aim of the Department is to give its students a thorough training, both theoretical and practical, in all branches of the law. The course of studies is so arranged as to impart that knowledge of the law which is indispensable to students in whatever jurisdiction they may intend to practice.

The fact that the class sessions are held in the evening has enabled the Department to secure the teaching services of active practitioners at the Chicago Bar. Hence, the law faculty is not committed to the exclusive use of any particular system of legal instruction; the professors have been chosen because of success in their special field, and it is not deemed wise to restrict them to any particular method of imparting the knowledge they have acquired from their study and experience. All of the professors have, however, adopted a system of instruction based on the principles of the **Ratio Studiorum.** Matter, whether text or adjudicated cases, assigned for home study is first gone over in lecture by the professor, who explains what is obscure or difficult and illustrates by practical examples the principles involved.

The student then studies the assigned matter and at the next class session is prepared for the recitation, which is an exhaustive quiz, sometimes by way of question and answer and often by the oral solution of hypothetical problems involving the principles explained and studied. The student, under this system, has ample

opportunity of learning thoroughly the law on each topic: First, from the **praelectio,** or explanation of the professor; secondly, from his own careful home study; and, lastly, from the recitation or class discussion.

REQUIREMENTS FOR ADMISSION.

Regular Students.—Applicants for admission to the Department must be not less than eighteen years of age, and must present proof of the successful completion of a four year high school course in a school of recognized standing. Graduates or students of private institutions with credits equivalent to those of high school graduates, will be admitted as regular students on proof of such credits.

At the time of matriculation, students must present proof of their preliminary education either by way of diploma or certificate, from the principal or director of the school from which they come. In no case will a student be admitted to the department who has not successfully pursued a four year high school course, or work equivalent thereto.

Advanced Standing.—Students who have successfully prosecuted a portion of their law course in a law school with equivalent courses and requirements may be admitted to the second or third year classes of the Department upon proof of such prior study.

FEES AND EXPENSES.

Matriculation.—In all cases a matriculation of Five Dollars is charged when a student is first registered. The fee is paid but once and is not returnable.

Tuition.—The tuition fee for regular students is Seventy-Five Dollars, payable quarterly in advance. A discount of Five Dollars will be allowed to students who pay the year's tuition in advance before October 1st.

Graduation.—Upon graduation of students a diploma fee of Ten Dollars will be charged.

Those desiring to take only certain courses will make arrangements with the Secretary of the Department, charges in such cases will be based on hours of classroom work.

DEGREES.

Upon successful completion of the entire regular course, as outlined, students are entitled to receive the degree of Bachelor of Laws, but before the degree is conferred each student is required to pass satisfactory written examination embracing the whole field of the law. In preparation for this examination a review course is given in the third year class, one evening each week for the entire year. The papers in this general examination are marked by the Executive Board of the Department.

Under no circumstances will a degree in law be conferred upon a student who has not completed one entire year of work in the Department.

The Degree of Bachelor of Laws was Conferred upon the following Students on June 20th, 1912

William J. Anderson
Augustine J. Bowe, A. M.
Sarsfield Collins, A. B.
John W. Cudihy, A. B.
William H. Dillon, Jr., A. B.
Joseph F. Dillman
Lee Daniels
William J. Flaherty
James J. Gaughan, A. M.
James J. Grogan
Erwin J. Hasten, A. B.
Thomas J. Howe
William B. Keefe
Joseph A. Kowalski
Lawrence M. Kevin
Alfred O. Lambeau, A. B.
Emmett Moynihan
William J. McGah
Phillip H. McGrath, A. B.
Joseph D. McNulty, A. M.
Harry Smitz
Stanley M. Vesely
Lawrence J. Walsh, A. M.
Elmer J. Whitty

CLASS SESSIONS—COURSE OF STUDIES.

The regular course covers a period of three years, divided into a First, Second and Third year.

Class sessions are held on Monday, Tuesday, Wednesday and Thursday evenings from 6:30 to 9:00. Regular and punctual attendance on the part of the students and also daily preparation for class recitations are prerequisites, and delinquency in either particular will be deemed sufficient cause for cancellation of the delinquent's registration.

The quarterly system has been chosen as best adapted to the requirements of an evening law school. Each course, upon its completion, is made the subject of a searching written examination. This promotes more careful study and admits of thorough examination with less tax upon the student's endurance than a general test at the close of each year. An average of 70 per cent must be attained upon the written examination in each subject for students to continue with their classes. Those who fail to attain 70 per cent in any topic may, in the discretion of their professor, be given a second examination, but no student who fails to attain such average in two topics will be allowed such re-examination.

The following schedule shows the required law courses arranged according to years:

FIRST YEAR.

I. Elementary Law.—5 hours per week for 12 weeks.

A course on the elements of English and American law, its sources, development, scope and classification, designed to give students a general view of the law. Courts, their organizations and functions. Reporting of judicial decisions. Introductory work on use of law library.

Text: Robinson's Elementary Law.

II. The Law of Contracts.—5 hours per week for 12 weeks.

Nature of the consensual obligation—Classifications of contracts—Formation of simple contracts; offer and acceptance, agreement as affected by mistake, misrepresentation, fraud, duress and undue influence; Consideration, its historical development and modern aspect; Capacity to contract, contracts of minors; The statute of frauds, contracts within and the satisfaction of the statute; Illegal contracts, at common law, and under modern statutes—Conditions in contracts; precedent, either express or implied and rules governing same, conditions subsequent, waiver of conditions. Formal obligations and their execution—quasi-contractual obligations—The construction and interpretation of contracts—Operation of contracts, assignment, promises for the benefit of a third person—Discharge of

contracts; By agreement, novation, and release; By operation of law, impossibility of performance, the general rule and exceptions, Merger, bankruptcy, material alteration of instrument; By performance, tender; By breach; Accord and satisfaction—Parties to and measure of damages in actions on contracts.

Texts: Instructor's printed syllabus,
Huffcut and Woodruff's Cases on Contracts.

III. The Law of Torts.—5 hours per week for 12 weeks.

The law of Civil Wrongs, historical development and modern theory—Tort distinguished from crime, from breach of contract—Option to sue in Contract or Tort—Damnum absque Injuria—Injuria sine damno—Specific Torts, and defense to actions therefor, false imprisonment—malicious prosecution, abuse of process, assault and battery, criminal conversation, seduction, unlawful interference with contract, libel and slander, trespass to property, deceit, slander of title, unfair competition, nuisance, negligence, Tort Remedies—Workmen's Compensation laws—Parties to Tort actions; pleadings, evidence and measure of damages in actions for. Injunction as a tort remedy.

Text: Burdick on Torts.

IV. The Law of Crimes and Criminal Procedure.—5 hours per week for 10 weeks.

Crime defined—The Criminal Act, Intent as an element of Crime, intent in statutory offenses—Criminal Capacity—Justification for crime—Classifications—Criminal Jurisdiction, Extradition—Criminal procedure; Arrest, Examination, Commitment, Accusation by way of complaint, information and indictment; Arraignment and plea; Trial and hearing of evidence in criminal cases; Verdict; Proceedings after verdict; Sentence; Writ of error. The writ of habeas corpus.

Constitutional rights of persons accused of crime—Specific criminal offenses, against the Government, against public peace, health and economy—against morality and decency, against the person—against a dwelling house—against property—Maritime offenses.

Text: May on Criminal Law.

V. The Law of Property, A.—2½ hours per week for 10 weeks.

Property in general, classifications. Distinctions between real and personal property. Fixtures, emblements, burial lots, church pews. Subject matter of personal property. Title to personalty and methods of acquiring same—Original acquisitions; capture, seizure, finding of lost and reclaiming of abandoned goods, treasure trove, reclamation of wild animals, accession natural and artificial, patents, copyrights, trade-marks, literary property. Act of Law: forfeiture, corporate succession, judgment, insolvency and bankruptcy, intestacy. Transfer by parties; by contract embracing sale, assignment, endorsement, bailment, etc.; by gift, inter vivos, causa mortis; by will or testament.—Joint interests in personalty, classification, incidents.—Suits to recover personalty, pleadings, evidence and measure of damages in actions for trespass to personalty.

Subject matter of real property, lands, tenements, hereditaments.—The feudal system of tenures.—Interests in realty according to quantity;

freeholds of inheritance, life estates, definitions and incidents.—Interests in realty according to quality, absolute and conditional estates.—Interests according to time of enjoyment, estates in praesenti, in futuro.—Joint Interests, definitions and incidents.

Text: Instructor's Typewritten notes.
Selected American cases.

VI. The Law of Principal and Agent.—2½ hours per week for 15 weeks.

The doctorine of representation—The relation of Principal and Agent distinguished from that of Master and Servant—Creation of Agency, by appointment, by ratification, by estoppel—What acts may be done through agent, capacity of parties, joint principals and agents—Termination of agency, by agreement, by operation of law, by revocation and renunciation.—Irrevocable agencies—Construction of Agents' authority, powers incidental and implied—Rights and liabilities between principal and third persons—Admission by agent general rule as to when competent to bind principal and when incompetent—Notice to agent, when imputed to principal. Exceptions to rule imputing knowledge to principal—Rights and Liabilities between agent and third persons—The case of Public Agents—Rights and Liabilities between principal and agents—Duties of agent to Principal—Duties of principal to agent—Sub-agents, general rules as to delegation of authority, when authority to delegate will be implied—Relation of sub-agent to principal in such case, rights of sub-agents as to remuneration, reimbursement and indemnity.

Text: Huffcut on Agency.

VII. The Sale of Goods.—2½ hours per week for 6 weeks.

Contract of sale, distinguished from other transactions; subject matter of contract, future goods, goods which have perished; the consideration, ascertainment of price, agreement to sell at valuation. Conditions and warranties defined; implied warranty of title; Caveat Emptor; implied warranty of quality in sales of goods ordered for a particular purpose known to vendor, of goods ordered by description, of articles of food, by sample, by manufacturer. Effects of the contract, when title passes, illustrations. Performance of the contract. Unpaid vendor's lien, Stoppage in transitu, re-sale. Actions for breach of the contract, remedies of the seller, remedies of buyer, measure of damages. The Statute of Frauds, contracts of sale within and satisfaction of the Statute.

Text: Benjamin's Principles of Sales.

VIII. The Law of Bailments and Carriers.—2½ hours per week for 14 weeks.

Definition. Principles common to all contracts of bailment. Roman classification, modern classification. Rights and liabilities of parties in bailments for sole benefit of bailor; in bailments for sole benefit of bailee; in mutual benefit bailments. Termination of bailments. Innkeepers, rights and liabilities as to guests, their person, their property; modern statutes affecting innkeepers' liability. Lien of innkeepers.

Common carriers of goods, their extraordinary liability; contracts limiting liability; Carriers of live stock, of baggage; Termination of ex-

traordinary liability. Lien. Common Carriers of passengers, who are; rights and liabilities of. Actions against carriers of goods, or persons; Parties, pleadings, evidence and measure of damages.

Text: Browne on Bailments.

IX. The Law of Persons and Domestic Relations.—2½ hours per week for 15 weeks.

Domestic relations defined and enumerated.—Husband and wife, the nature of marriage as a contract, as a status. Impediments to marriage, consent in the contract as affected by duress, fraud and mistake. Breach of contract to marry, action for and measure of damages in. The solemnization of marriage at common law, modern statutory provisions. The legal consequences of marriage, mutual duties and rights of husband and wife. The property rights of husband and wife, development of the law. Rights of surviving husband or wife in property of deceased spouse. Disabilities of coverture, modern statutory enactments. Transactions between husband and wife. Rights of action in husband or wife against third persons, for wrongs against the relation, for other wrongs, liability of husband for necessaries furnished wife. Dissolution of marriage, actions for divorce and separate maintenance, procedure in, and defenses to, such actions.

Parent and child, legitimacy and illegitimacy. Duties and liabilities of parents: Maintenance, liability for necessaries furnished by third person; Protection; Education; Liability of parent for torts of child. Rights of parents: Custody and control; Services, Emancipation; Right to recover for injuries to child, loss of service in general. Transactions between parent and child.

Guardian and Ward. Kinds of guardianship. Jurisdiction in matters of guardianship. Appointment and qualification of guardians. Powers and duties of guardians in general, as to ward's person, as to ward's estate. Transactions between guardian and ward. Accounting by guardian. Persons under special disability. Infants. Aliens. Insane persons. Spendthrifts.

Text: Long on Domestic Relations.

X. The Law of Property, B.—2½ hours per week for 30 weeks.

The latter half of course A reviewed and amplified. The partition of joint estates. Mortgages, the common law and equitable theory, rights and liabilities of mortgagors and mortgagees, remedies and remedial rights incident to mortgages. Reversions. Remainders, estates within the rule in Shelly's case. Uses and trusts, the statute of uses, future uses. Executory devises, doctrine of perpetuity, rules against accumulation. Powers, their nature, creation and execution. Incorporeal hereditaments, rights of common, easements, franchises, rents. Licenses. Title to realty, nature and sources of. Descent, common law and modern statutory rules. Accretion, alluvion and avulsion. Adverse possession. Estoppel. Public and private grants. Common law conveyances, conveyances under statute of uses, modern statutory deeds. Deeds, their requisites and component parts. Covenants in deeds; express, implied, covenants running with the land. Involuntary alienation, eminent domain, tax titles. Title by devise, the history and development of the law of wills.

Text: Tiedeman on Real Property.

XI. Abstracts and Conveyancing.—10 hours.

Lecture and Practice Course. The survey of public lands, ranges, meridians, townships, sections, subdivisions. The recording system in general, indicii of grantors and grantees. The tract index, the record. The preparation of the abstract, what it should contain, judgment searches. Examination of specially prepared abstract. The merchantability of an abstract. Practical exercises in preparation of contracts to sell real estate, statutory forms of deeds, warranty and quit-claim, trust deeds, etc. The Torrens system of registering titles.

XII. The Law of Evidence.—2½ hours per week for 20 weeks.

General character of American law of evidence. Questions of law and questions of fact, functions of the court and jury. The rules governing the production of evidence. Burden of proof, prima facie case. Presumptions of law, conclusive and disputable; presumptions of fact. Admissions, confessions. Leading principles of exclusion; character evidence, rule in civil and criminal cases, how proved when material; opinion evidence, matters forming subject of expert opinion; hearsay evidence, exception to rule against hearsay. Real evidence. Writings, best evidence rule; foundation for production of secondary evidence. Witnesses, qualifications of witnesses, privileged persons and communications, refreshing memory. Examination of witnesses, in chief, cross examination. Impeachment of witnesses.

Text: Hughes on Evidence.

XIII. Common Law Pleading.—2½ hours per week for 20 weeks.

History and classification of Actions: real, personal and mixed. The forms of action, their definition, division and application. Statutory actions.

Parties to actions—in general—in actions ex contractu—in actions ex delicto—misjoinder and nonjoinder.

The successive steps in a common law action. The order of pleadings. The declaration—what allegations it must contain to suit the form of action brought. The demurrer—divisions, purpose and use. The dilatory pleas—to the jurisdiction—in suspension—in abatement—their nature and purpose. Pleas in bar—The common traverse—pleas by way of confession and avoidance. Estoppel—new assignment—pleas puis darrein continuance—Repleader—Proceedings after verdict—after judgment. The rules of pleading—to effect unity—certainty—consistency and simplicity—directness and brevity—Miscellaneous rules. Extraordinary legal remedies, their history, nature and object—Mandamus—Certiorari—Quo Warranto—Prohibition—Habeas Corpus—Scire facias.

Text: Shipman's Common Law Pleading.

XIV. Equity Jurisprudence.—2½ hours per week for 22 weeks.

History and development of equity. The maxims of Equity. Its three great divisions. Equitable Titles—Trusts, their origin and history, Statute of uses, classification of trusts; Express trusts, their creation and essentials, doctrine of trusts by precatory words; implied trusts, resulting and constructive; trusts for married women, wife's equity to a settlement; charitable trusts, their origin and characteristics, the cy-pres

doctrine, rules against perpetuities and accumulations as applied to charitable trusts; Trustees, their powers and duties, jurisdiction of equity over trustees. Mortgages, the equitable theory of a mortgage, nature of the equity of redemption, foreclosure suits, rights and duties of mortgagors and mortgagees. Assignments, common law rule forbidding assignments of choses in action. Equitable doctrine, rights of action of the assignee at law and in equity.

Equitable Rights: Accident defined, basis upon which relief is afforded in equity, cases in which equity relieves, lost instruments, penalties, forfeitures, defective execution of powers. Mistake defined, mistake of law, requirements precedent to relief on mistake of fact. Fraud, general nature of equitable jurisdiction in cases of fraud, Concurrent jurisdiction, distinction between relief at law and in equity, Exclusive jurisdiction; Lord Hardwicke's division of fraud, actual fraud, fraud arising from intrinsic nature of the transaction, fraud presumed from the circumstances, relations of the parties, fraud affecting third persons not parties to the agreement. Equitable doctrine of notice, its application and limitations, actual and constructive notice, lis pendens. Equitable estoppel, basis of doctrine, applications. Election, doctrine defined, circumstances under which it arises, consequences of election, applications of doctrine. Conversion and reconversion, general nature and extent of the equitable doctrine, illustrations. Adjustment, set-off, contribution, exoneration, subrogation, marshalling of assets. Equitable liens, distinctions between liens at law and in equity, instances of equitable liens.

Equitable remedies; Specific performances; Injunctions, to restrain infringement of equitable rights, to restrain proceedings at law, bills of peace and interpleader, injunctions to protect purely legal rights. Reformation, re-execution, rescission and cancellation of instruments, general principles of equitable relief, instances. Account. Partition. Bills to assign dower. Bills to establish boundaries. Partnership bills, reasons for resort to equity, accounting, dissolution, suits between firms having a common member. Creditor's bills, against debtor during lifetime, administration suits. Protection afforded estates of infants, idiots and lunatics in equity, modern American statutes. Bills for discovery, and to take testimony de bene esse, grounds of equitable jurisdiction, changes effected by modern statutes. Bills quia timet. General nature of equitable jurisdiction to appoint receivers, illustrations, powers and duties of a receiver. The writ of ne exeat.

Text: Bispham's Principles of Equity.

XV. Wills and the Administration of Decedent's Estate.—2½ hours per week for 16 weeks.

History of the law of wills and testaments; Legislative control of testamentary disposition of property, the law by which such disposition is governed. Wills distinguished from deeds, from contracts; The essential characteristics of a will, animus testandi, revocability. Statutory requirements in general and their satisfaction, nuncupative wills. Who may make a will, capacity as affected by mistake, fraud, duress, and undue influence. What can be disposed of by will. Who can take under a will,

statutes of mortmain, modern law. Revocation of wills. By specific act manifest on face of will. By a later will, distinction between will and codicil. By act of the law. Alteration of wills, republication. Probate of Will and the contest thereof. Construction of wills. Lapsed, void and adeemed legacies. Classes of legacies, abatement of legacies, order of abatement. Satisfaction of legacies. Renunciation by widows and election to take under statute.

Practical administration of decedent's estate—testate decedent, petition for probate and letters testamentary, the hearing, proof in solemn form, executor's bond, issuance of letters testamentary; intestate decedent, application for letters of administration, who is entitled to administer, bond of administrator, issuance of letters. Procedure subsequent to issuance of letters testamentary and of administration; Taking possession of decedent's personal property, citation to compel delivery of assets. Inventory of property, including legal description of real estate. Appraisement of, personal assets, allowance of widow's and child's award, widow's selection; Publishing for claims, adjudication term, order of adjudication, procedure in case of claims filed after adjudication term, hearing and allowance or refusal of claims, classes of claims. Sale of real estate on insufficiency of personal assets to pay claims, procedure and decree. Final account, notice, objections, hearings; Final order.

Text: Rood on Wills.
Instructor's Typewritten Notes.

XVI. The Law of Partnership.—2½ hours per week for 12 weeks.

Definitions and distinctions. Purposes for which a partnership may be created. Who may be partners. The contract of partnership and the evidence thereof. The tests of partnership, between parties themselves, as to third persons. Incidents of partnership, articles of agreement, firm name, good will, the firm capital, property of the firm. Rights and duties of partners toward each other. Actions between partners, at law, in equity. The powers of partners, as between themselves, as between firm and third persons. Liability of partners for acts of co-partner, in contract, in tort. Liability of co-partnership for acts of agents and servants. Nature and extent of the liability of partners. Actions by and against the firm. Termination of partnership. Dissolution, Notice, effect of upon powers of partners. Application of partnership assets. Final accounting. Limited partnerships.

Text: Mechem's Elements of Partnership.

XVII. The Law of Suretyship.—2½ hours per week for 18 weeks.

Suretyship in general, definitions and distinctions. Real suretyship. Consideration for the suretyship contract. Incapacity of parties as affecting the contract. Offer of guaranty, its acceptance and nature thereof. Principal or surety competent but not bound: conditional execution and unauthorized delivery; fraud, duress, illegality and other matters affecting assent and execution. Legal requirements as to form of contract, statute of frauds. Construction and interpretation of the contract. General and special, continuing and non-continuing, limited and unlimited guaranties. Negotiability and assignabilty of contracts of suretyship and guaranty.

Surety's right to re-imbursement or indemnity. The right of subrogation. Contribution between co-sureties, defenses to actions for. Subrogation as to co-sureties. Surety's right to send creditor against the principal or to compel principal to exonerate him. When demand on principal and notice of default is necessary to charge surety or guarantor. Payment and satisfaction or tender by principal as discharge of surety. Discharge by operation of law. Alteration of principal's contract or surety's risk without consent of surety. Release of surety by extension of time to principal. Loss or surrender of securities by the creditor. Official bonds. Bonds in the course of judicial proceedings.

Text: Spencer on Suretyship.

XVIII. The Law of Negotiable Instruments.—2½ hours per week for 10 weeks.

General characteristics of negotiable instruments, the law merchant. Form and interpretation of negotiable instruments. Consideration of negotiable instruments, as it affects bona fide ownership. Negotiation, classes of indorsement, the indorser's undertaking. Rights of holders, what constitutes a holder in due course. Liability of parties, those primarily liable, those secondarily liable. Presentment for payment, time and place, waiver. Notice of dishonor, form of notice, to whom and how given, waiver. Discharge of negotiable instruments.

Bills of Exchange, their form and interpretation. Acceptance of bills, presentment for acceptance, protest, acceptance supra protest. Payment for honor, rights of payor.

Promissory notes and checks, defined, presentment of checks, effect of certification. Actions on negotiable instruments.

Text: Bunker on Negotiable Instruments.

XIX. Practice and Procedure.—2½ hours per week for 18 weeks.

Commencement of actions, ordinary suits at law; actions in attachment, replevin, garnishment, and forcible entry and detainer. Bail in civil cases. Security for costs, suits in forma pauperis. Preparation of brief on the facts, on the law.

Appearance of defendant, the practice in default cases, setting aside defaults.

The pleadings: Declaration, practice in drawing in leading common law actions. Plea, what may be shown under the general issue in each action, what must be specially pleaded. Demurrers, general and special, disposition of.

Amendments. Motions of course, contested motions. Putting case at issue. Trial: Examination of jurors, challenges. Opening statement. Production of evidence, prima facie case in each form of action. Motion to direct verdict. Evidence in defense, rebuttal. Closing arguments. Instructions to jury. Verdicts, general and special. Proceedings after verdict and before judgment. Judgment, appeal, writ of error. Judgments by confession. Practice in entering, and proceedings to vacate.

The case in the appellate tribunal, practice. Abstract of record, brief, oral argument. The decision of the higher court, proceedings on affirmance, on reversal.

Removal of causes from State to Federal Courts. Practice and Procedure in Federal Courts. Appellate practice. Removing case from State Supreme Court to Supreme Court of the United States.

Texts: Instructor's Notes; Smith's Court to Court.

XX. Equity Pleading and Practice.—2½ hours per week for 20 weeks.

Nature of equity and common law jurisdiction, stare decisis. Parties to the bill, necessary parties, proper parties. Process, service and return. Appearance. Form and requisites of the bill. Bills not original. Demurrers. Pleas, pure, mixed, negative. Answer, as a defense, as furnishing discovery. Replication. Amendments, supplemental pleadings and interrogatories. Evidence in chancery. Motions of course and motions not of course. The hearing. Decrees and decretal orders, final, interlocutory. Masters in chancery, references, reports, objections, exceptions. Injunctions, Receivers. The review of decrees by courts of appellate jurisdiction. Equity practice in the Federal Courts.

Text: Rush, Equity Pleading and Practice.

XXI. The Law of Insurance.—2½ hours per week for 10 weeks.

History and development of insurance. Nature and requisites of the insurance contract, parties, insurable interest, the consideration. Representations and Warranties. Agents and their powers. Waiver and estoppel. The standard fire policy. Terms of the life policy. Marine insurance. Accident and health insurance. Guaranty, credit and liability insurance.

Text: Vance on Insurance.

XXII. The Law of Private Corporations.—2½ hours per week for 20 weeks.

Corporations defined and classified. The creation and organization of Corporations, general corporation laws, their requirements and compliance therewith. Promotion of Corporate enterprises. The Corporation as a legal entity, as a citizen. De facto corporations, collateral attack upon, and the doctrine of estoppel. The corporate charter, as a contract, the construction of corporate grants. Powers of a corporation, incidental powers, particular powers. Acts ultra vires, general rule, its basis, Estoppel to assert defense of ultra vires. Corporate liability for torts and crimes, history and growth of the law. Right of corporation to exercise its powers in foreign state, the rules of comity. Power of state over foreign corporations, modern statutes and compliance therewith.

Membership in non-stock corporations, in stock corporations.

Capital and capital stock distinguished.

Shares of stock, classes of stock.

Stock subscription contracts. Rights of holders of stock, to participate in management, to inspect records, to dividends. Transfer of shares.

Corporate meeting and elections. The management of corporations, express and implied powers of officers and agents.

The liability of stockholders. Dissolution of Corporations.

Text: Elliott on Private Corporations.

XXIII. The Law of Public Corporations.—2½ hours per week for 12 weeks

Nature of municipal corporations; creation, alteration, and dissolution; legislative control in general; administration of government in general; departments, including governmental functions, quasi-governmental functions and commercial functions; powers; acquiring, holding and dealing with property; liability for torts; liability of contracts; remedies of creditors.

Text: Elliott on Municipal Corporations.

XXIV. Constitutional Law.—2½ hours per week for 20 weeks.

The relation of the states to the national government. The establishment and amendment of constitutions. Construction and interpretation of constitutions. The three departments of government, their relation to each other, checks and balances. General jurisdiction of the national government. Due process of law, equal protection of laws, police power, taxation, eminent domain, power to regulate commerce, ex post facto laws, law impairing the obligations of contracts.

Text: Boyd's Cases on Constitutional Law.

XXV. Conflict of Laws.—2½ hours per week for 12 weeks.

Jurisdiction: sources of law and comity; territorial jurisdiction; jurisdiction in rem and in personam. Remedies, rights of action and procedure. Creation of rights: personal rights; rights of property. Inheritance. Obligations ex delicto and ex contractu; Recognition and enforcement of rights; personal relations; property; inheritance; administration of estates; judgments; obligations.

Text: Minor's Conflict of Laws.

XXVI. Legal Ethics.—4 lectures of 2 hours each.

The duty of the lawyer to the courts, attempts to exert influence on courts. The defense and prosecution of persons charged with crime. Representing adverse and conflicting interests. Compensation of attorneys. The lawyer in court, attitude toward court, opposing counsel, and witnesses. Advertising. Stirring up litigation, responsibility for litigation. The lawyer's duty in its last analysis.

Text: Code of Ethics of American Bar Association.

XXVII. Review Course.—2½ hours per week for 14 weeks.
1 hour per week for 24 weeks.

Designed to a survey of the whole field of the law, it is in a sense the complement of the course on elementary law which initiated the student's work. The leading principles of all branches are thoroughly reviewed, the student's knowledge is tested, and errors and doubts corrected and removed. A great part of the time is necessarily devoted to lecture and discussion by the instructor, but every branch is made the subject of an exhaustive quiz, chiefly by the submission for oral solution of hypothetical problems involving the principles under discussion. Considerable opportunity is thus afforded for practical work in the analysis of legal problems and in the use of the law library.

Text: Instructor's Typewritten Syllabus.

*XXVIII. Practice Court.—2 hours per week for 18 weeks.

Rules of procedure are based on the rules in force in the Circuit Court of Cook County. Statements of actual cases are assigned to the students who are required to institute, prosecute and defend the proper proceedings at law or in equity as the case may be. Occasionally, also, work is assigned in matters of a purely criminal nature. Whilst the members of the Third year class are naturally required to take the leading part in the exercise of the Court, opportunity is afforded all other students, as their progress in the law warrants, to take advantage of the training afforded by the course. At the end of each trial, the presiding judge comments on and criticizes the methods of the students, explaining all points of difficulty presented by the proceedings.

Each student is required before graduation to remove a case from the Practice Court to an Appellate Tribunal; preparing the record, abstract, and briefs substantially as required by the rules of practice in the Appellate Court of Illinois.

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*Omitted in 1913-1914.

Course of Logic, Philosophy and Sociology

This class was organized in October, 1902. It is conducted in connection with the Law Department, meeting Friday evenings from 6:30 to 9 p. m., from September to May, in the Ashland Block.

Its object is to furnish to college graduates, advanced and special students and professional gentlemen, an opportunity to review their philosophy or to make a more thorough and practical study of its fundamental questions, after some experience in practical life will have made them realize their importance. Other gentlemen, though not college graduates nor law students, are admitted to the class if their tastes and previous attainments qualify them to profit by it.

The class exercises consist of lectures and discussions on the chief points of Logic, Psychology, Ethics and Sociology. The subject matter of the past year embraced three courses, Logic, Epistemology and Sociology.

Those who have already attained the degree of A. B. will be eligible to that of A. M., on the conditions of the requisite attendance, the presentation of a paper on a philosophical subject and an examination satisfactory to the Board of Managers of the University.

No Text-book is assigned, but instead a syllabus of the lecture is distributed each evening and a list of standard reference books is supplied.

Students of the Law Department are admitted without additional fee; others are charged a fee of ten dollars, payable in advance for the whole course.

Professor: Rev. Frederic Siedenberg, S. J.

The following are outlines of the course:

SOCIOLOGY.

FIRST YEAR.

The Social Problem.—Economic evolution—Liberalism and Socialism. The factors of solution—the individual, the state, the church—Solidarism.

The Labor Question.—Conditions and reforms—relation of employer and employe—wages—strikes—lockouts—boycotts—arbitration and conciliation. Labor Unions and Manufacturers Association—Private reforms—Industrial betterment. Legislative reforms—Minimum wage—Workingmen's Compensation—Labor hours and Sunday rest—Moral and sanitary environment—woman, child and immigrant labor—Compulsory insurance—death—disability—unemployment. Health, housing and transportation. Co-operative Societies—the small factory and handicraft. Vocational education. Religious influences.

SECOND YEAR.

Commercial and Industrial Problems.—Competition—law of demand and supply. Trusts and Monopolies—economic and social advantages and dangers. Moral and legislative restrictions. Railroad evils and government ownership. Interstate Commerce and Federal Control. Currency legislation, profits, rents and interest.

Problems of Government.—National and local—poverty and pauperism and crime. Tuberculosis and occupational diseases. Social and Sex Hygiene. The social evil and white slave traffic. Charity and Philanthropy defectives, dependents and delinquents. Modern methods of investigation, interpretation and treatment.

The Agrarian Problem.—Conditions and objects of reform. Social agencies and agricultural schools. Scientific and monetary government aid. Back-to-the-land movement and Colonization of Immigrants. Preservation of National resources.

The Woman Problem.—The general movement—woman's place in society—her present condition—Suffrage and reform. Woman in industry and domestic service. Higher, Vocational and co-education. Christianity and the exaltation of woman.

LECTURES ON MORAL PHILOSOPHY.

A course in general and special ethics with particular application to legal practice.

Definition; Scope; Object-matter; Relation to other sciences; Postulates.

The human act; Knowledge and free-will; Obstacles to voluntariness of acts; Imputability.

The end and the good; The last end; The real and apparent good; The highest good; The pursuit of happiness.

Moral good and moral evil; The essence of morality—False views: Positivists, Utilitarians, Sensists, Rationalists;—Moral Realism; The determinants of morality.

Law-Requisites for a moral law; The eternal law; The natural law—Its properties; Ultimate basis of obligation—Relation to positive law.

The proximate, subjective form of morality—Moral Conscience—Probobilism.

Moral power and moral obligation—Rights and duties—Basis, connotation, distinction—The so-called rights of animals—Collision of rights.

Duties to God—Religious worship, interior and exterior, private and public.

Duties in respect of self—Extremes of Egoism and Altruism. Personal duties regarding the soul, the body, external goods—Reputation, liberty of action, material possessions. Suicide. Veracity and the obligation of keeping secrets. Duties to others—To respect their rights to health, integrity physical and moral, life, reputation, property. Neglect of these duties of the violation of corresponding rights. Protection against unjust aggression—The moderation of blameless defense.

The rights of ownership: basis, realization, titles. Socialism, Society, conjugal, parental, industrial, civil. Unity and indissolubility of matrimony. Parental right in education. Employer and employee.

Nature and origin of civil society. The social compact. Nature of civil authority, origin; Designation of governing power.

Functions of government, legislative, judicial, executive. The right of the sword—Capital punishment. War.

LEGAL ETHICS.

Qualities of law. Their enactment, application, enforcement. Qualifications of legislators; Justice and expediency primary considerations in passing of laws; Unnecessary multiplication of statutes. Caution against retroactive laws.

The dignity of Judge's office. Requirements. Ordinary function. Doubt, in civil cases, in criminal cases. Self-protection against the attempt to influence or corrupt.

The Lawyer's duty toward the profession—knowledge required; what he owes to the Court, opposing counsel, client. The undertaking of doubtful cases, civil, criminal. Means and method. Fee. A rule of conduct.

Register of Students

First Year

Beam, Harry P. ..... St. Ignatius Academy
Burns, John S. ..... Niagara University
Cagney, J. E., Jr. ..... St. Ignatius Academy
Carroll, T. J. ..... St. Patrick's Com'l Academy
Caulfield, P. C. ..... St. Francis College
Coleman, D. P. ..... Honesdale, Pa., High School
Conners, Ambrose V. ..... St. Bede's College
Duffy, John T. ..... St. Ignatius Academy
Dwyer, J. V. ..... St. Joseph's College
Elliott, Glenn J, A. B. ..... Loyola University
Engels, Robert R. ..... Dodgeville, Wis., High School
Featherstone, G. F., Jr. ..... Lewis Institute
Fitzpatrick, J. Ward ..... St. Ignatius Academy
Gorman, Aloysius F. ..... St. Ignatius College
Hanrahan, Edward J. ..... St. Ignatius College
Harding, John T. ..... Carl Schurz High School
Hassell, Paul ..... Southern Collegiate Institute
Hurley, F. A. ..... St. Ignatius College
Johnson, Swan M. ..... Yewayago, Mich., High School
Juhl, Curt ..... Royal College Sonderburg
Kilgallon James J. ..... St. Patrick's Commercial Academy
Killgallon, Michael R. ..... St. Ignatius Academy
Koch, Raymond J., B. S. ..... Armour Institute
Lucas, John T., B. S. ..... Armour Institute
Martin, Philip J. ..... Cathedral College
Muldner, George F. ..... Cleveland High School
McManus, James P. ..... St. Mary's College, Kansas
O'Connor, John F. ..... De Paul Academy
O'Donnell, Richard, A. B. ..... Loyola University
Pickett, James J., A. M. ..... Loyola University
Philbin, J. Fay ..... St. Ignatius Academy
Quinlan, Perry ..... Loyola Academy
Quinn, Edward J. ..... St. Ignatius Academy
Regan, Richard H. ..... St. Ignatius College
Reilly, F. J. (Special) ..... Dubuque High School
Spiegel, Elmer John, A. B. ..... Loyola University
Smith, Thurber M., A. B. ..... St. Mary's College, Kansas
Stack, Thomas J. ..... St. Patrick's Commercial Academy
Stefanak, Andrew G. ..... St. Procopius College
Szizepanski, George A. ..... St. Stanislaus College
Tremko, Michael ..... St. Procopius College
Van Den Broeck, C. E. ..... St. Joseph's Institute, Belgium
Waugh, William F. ..... Utah Agricultural College
Welch, Edward M. ..... University of Chicago

SECOND YEAR.

Bahm, J. Stanley.....Hyde Park High School
Beauvais, Auguste V., A. B.....Loyola University
Bowe, William J.....St. Ignatius Academy
Colgan, Daniel J.....St. Ignatius Academy
Donahue, Leo L., A. B.....Loyola University
Donigan, James K.....St. Ignatius College
Dunlavy, E. J.....St. Ignatius College
Dwan, John A.....St. Ignatius College
Elward, J. F., A. B.....Loyola University
Foley, E. I.....St. Ignatius Academy
Ginnane, Thomas J.....St. Patrick's Commercial Academy
Graham, Robert E.....St. Ignatius College
Green, Norman.....Englewood High School
Harkins, Leo.....St. Ignatius Academy
Hayes, John J., A. B.....Loyola University
Holden, Sylvester E.....St. Ignatius College
Leahy, Maurice F.....Christian Bros. College, Ireland
Lemmer, John R., A. B.....Loyola University
Lynch, Robert D.....De La Salle Institute
Malloy, John C.....St. Ignatius College
Meister, Edwin F.....University of Illinois
McCann, James, R. S.....Christian Bros. College, Ireland
McTaggart, Thomas.....Arcola High School
McTaggart, William C.....Arcola High School
McShane, James E.....Cathedral College
Reeve, J. Fred, A. B.....Loyola University
Ryan, Leo A., A. B.....Loyola University
Ryan, Thomas M.....St. Francis College
Schaf, Augustine L.....St. Ignatius Academy
Sebastian, Leo H., A. B.....Loyola University
Sleater, William W., Jr.....St. Louis University
Sullivan, Eugene T.....St. Patrick's Commercial Academy
Sullivan, George D.....St. James High School
Trainor, Emmett.....St. Viator's College
Twomey, J. Edward, A. B.....Loyola University
Ulrich, Alonzo E.....St. Ignatius Academy
Wade, Walter A.....St. Ignatius Academy
Wall, Joseph A.....South Division High School
Ward, Martin M.....De La Salle Institute

THIRD YEAR.

Bosser, Alfred C.....Appleton, Wis., High School
Brophy, James G.....St. Ignatius Academy
Brundage, Howard A.....St. Ignatius College
Collins, Thomas D.....University High School
Corcoran, Vincent A., A. B.....Georgetown University

DEVER, DANIEL W.....St. Ignatius Academy
DONAHOE, HENRY D.....University of Notre Dame
DOUGHERTY, RAYMOND A., A. B.....De Paul University
FITZMAURICE, GEORGE.....St. James High School
FOCHTMAN, WILBERT.....St. Joseph's College
FOSTER, JOHN.....Calumet High School
GARDINER, CHARLES A.....St. Ignatius Academy
GLEASON, JAMES M.....Lewis Institute
GORMAN, JOHN J.....St. Ignatius College
HEALY, WALTER C.....Georgetown University
HAYES, AMBROSE M., A. B.....Gonzaga College, Wash.
HOGAN, F. P.....Fonda, Iowa, High School
LEONARD, J. WILLIAM.....St. Ignatius College
MAGINNIS, T. J., A. M.....St. Mary's College, Kansas
MORONEY, J. J.....St. Xavier's College, Cincinnati
MCGRATH, T. B.....St. Ignatius Academy
NOONAN, JOHN A.....St. Ignatius Academy
O'CONNELL, GEORGE V., A. B.....St. Ignatius College
O'HARA, EDWARD J.....Christian Bros. College
PERKINSON, WILL J.....Crane Technical High School
PHILLIPS, JESSE.....Walnut Hills High School, Cincinnati
PRYOR, LEO E.....Nebraska Normal
REEDY, THOMAS J., A. M.....Creighton University, Nebraska
YORKOWSKI, EDWARD T.....St. Ignatius Academy

Loyola University

School of Sociology

1914

Ashland Block—Sixth Floor
Clark and Randolph Streets
Chicago

CALENDAR FOR YEAR 1914-1915.

September 30, Wednesday.....Registration Begins

October 5, Monday.....First Session Begins

November 26, Thursday.....Holiday—Thanksgiving

December 12, Saturday.....First Session Ends

January 11, Monday.....Second Session Begins

February 12, Friday.....Holiday—Lincoln's Birthday

February 22, Monday.....Holiday—Washington's Birthday

March 27, Saturday.....Second Session Ends

March 29, Monday.....Third Session Begins

April 2, Friday.....Holiday—Good Friday

April 5, Monday.....Holiday—Easter Monday

June 5, Saturday.....End of School Year

Officers and Faculty

Rev. JOHN L. MATHERY, S. J.,
President of University.

Rev. HENRY S. SPALDING, S. J.,
Regent of Graduate Schools.

Rev. FREDERIC SIEDENBURG, S. J.,
Dean and Lecturer on Economics and Sociology.

Rev. Patrick A. Mullens, S. J.,
lecturer on social and legal ethics.

Arnold D. McMahon, A.M., LL.B.,
lecturer on civics and law.

Ambrose J. Gearon, A.B., LL.B.,
lecturer on local government.

Alfred de Roulet, A.M., M.Sc., M.D.,
lecturer on psychopathology.

Lenora Z. Meder, A.B.,
supervisor of field work.

Amelia Sears, B.S.,
lecturer on social investigation.

M. E. McNally,
registrar and librarian.

Special Lecturers

The following gave lectures during 1913-1914, and many of them have consented to lecture during 1914-1915:

HON. MARY BARTELME,
ASSISTANT JUDGE OF JUVENILE COURT.

W. L. BODINE,
SUPT. COMPULSORY EDUCATION, CHICAGO.

WILLIAM T. BOGAN,
PRINCIPAL, LANE TECHNICAL SCHOOL, CHICAGO.

MRS. JOSEPH T. BOWEN,
PRESIDENT, JUVENILE PROTECTIVE ASSOCIATION, CHICAGO.

GERTRUDE HOWE BRITTEN,
SUPT. JUVENILE PROTECTIVE ASSOCIATION, CHICAGO.

NELLIE BURKE,
CHILD PLACING DEPARTMENT, JUVENILE COURT.

WILLIAM H. CAHILL,
PROFESSOR OF ENGINEERING, LOYOLA UNIVERSITY.

JOHN CLAIR,
INDUSTRIAL COMMISSION, I. C. R. R.

EDWARD B. DE GROOT,
SECRETARY, CHICAGO PLAYGROUND ASSOCIATION.

REV. JAMES M. DORAN,
SUPT. ST. MARY'S TRAINING SCHOOL.

DR. ANNA DWYER,
STATE BUREAU OF CHARITIES.

RICHARD J. FINNEGAN,
CITY EDITOR, JOURNAL, CHICAGO.

CATHERINE GALLAGHER,
STATE INSPECTOR OF HOMES, SPRINGFIELD, ILL.

MICHAEL F. GIRTEN,
PROFESSOR OF LAW, LOYOLA UNIVERSITY.

DR. ALICE HAMILTON,
UNITED STATES DEPARTMENT OF LABOR, WASHINGTON, D. C.

CHARLES R. HENDERSON,
PROFESSOR OF SOCIOLOGY, CHICAGO UNIVERSITY.

EMMA HENDERSON,
DEPARTMENT OF HEALTH, CHICAGO.

P. R. HILLIARD,
UNITED STATES DEPARTMENT OF JUSTICE, CHICAGO.

HON. JACOB H. HOPKINS,
JUDGE, COURT OF MORALS, COOK COUNTY.

JOHN W. HOUSTON,
CHIEF ADULT PROBATION OFFICER, COOK COUNTY.

JOEL D. HUNTER,
CHIEF PROBATION OFFICER, COOK COUNTY.

REV. FRANCIS C. KELLY, D.D.,
PRESIDENT, CHURCH EXTENSION SOCIETY, CHICAGO.

JAMES C. KENNEDY,
PRESIDENT, SOCIETY OF ST. VINCENT DE PAUL, CHICAGO.

REV. WILLIAM J. KERBY, PH.D.,
PROFESSOR OF SOCIOLOGY, CATHOLIC UNIVERSITY, WASHINGTON, D. C.

SHERMAN C. KINGSLEY,
DIRECTOR, ELIZABETH MC CORMICK MEMORIAL FUND, CHICAGO.

EUGENE T. LIES,
SUPT. UNITED CHARITIES OF CHICAGO.

MARGARET M. LONG,
HEAD OF PROBATION DEPARTMENT, JUVENILE COURT.

OWEN R. LOVEJOY,
NATIONAL CHILD LABOR COMMITTEE, NEW YORK.

HON. A. A. MCCORMICK,
PRESIDENT, COOK COUNTY BOARD OF COMMISSIONERS.

HON. JOHN P. MCGOORTY,
JUDGE, CIRCUIT COURT, COOK COUNTY.

REV. JOHN WEBSTER MELODY, D.D.,
PROFESSOR OF THEOLOGY, CATHOLIC UNIVERSITY, WASHINGTON, D. C.

JOSEPH MEYER,
COUNTY AGENT OF PUBLIC RELIEF, COOK COUNTY.

HUMPHREY T. MOYNIHAN,
PRINCIPAL, PUBLIC SCHOOL, CHICAGO.

REV. P. J. O'CALLAGHAN, C.S.P.,
CHICAGO MORALS COMMITTEE.

HON. JOHN E. OWENS,
JUDGE, COUNTY COURT, COOK COUNTY.

HON. HUGO PAM,
JUDGE, SUPERIOR COURT, CHICAGO.

HON. MERRITT W. PINCKNEY,
JUDGE, JUVENILE COURT, COOK COUNTY.

DR. MARY O'BRIEN PORTER,
PROTECTORATE, CATHOLIC WOMAN'S LEAGUE.

DR. P. L. PRENTISS,
UNITED STATES IMMIGRATION BUREAU, CHICAGO.

EMMA QUINLAN,
HEAD MOTHER'S PENSION FUND, COOK COUNTY.

REV. J. ELLIOT ROSS, C.S.P.,
PAULIST CHURCH, CHICAGO.

REV. JOHN A. RYAN, D.D.,
PROFESSOR OF SOCIOLOGY, ST. PAUL'S SEMINARY, ST. PAUL, MINN.

JOHN D. SCHOOP,
ASST. SUPT. PUBLIC SCHOOLS, CHICAGO.

HON. THOMAS P. SCULLY,
JUDGE, MINORS' COURT, CHICAGO.

CATHERINE M. SHANNON,
HEAD OF CHILD PLACING DEPARTMENT, JUVENILE COURT.

REV. THOMAS V. SHANNON, S.T.L.,
EDITOR, "NEW WORLD," CHICAGO.

GRAHAM TAYLOR,
PRESIDENT, CHICAGO SCHOOL OF CIVICS AND PHILANTHROPY.

ELNORA E. THOMSON,
SUPT. ILLINOIS MENTAL HYGIENE SOCIETY.

EDWARD T. TOBIN,
SUPT. OF SCHOOLS, COOK COUNTY.

Hon. Joseph Z. Uhlir,
JUDGE, COURT OF DOMESTIC RELATIONS, CHICAGO.

Harriet Vittum,
HEAD, NORTHWESTERN UNIVERSITY SETTLEMENT.

General Information

PURPOSE.

Besides giving a thorough course in the basic principles of sociology the purpose of this school is also to give fundamental and practical courses in civics and social economy, as a preparation for social and charity work of all kinds.

HISTORY.

An evening class in Philosophy and Sociology was formed in October, 1902, and since that time has been regularly conducted in connection with the Law Department, meeting Friday evenings from 6:30 to 9:00 P. M., from September to May. Its object was to furnish college graduates, special students and professional men an opportunity to review their mental philosophy and to make a more thorough study of social questions after some experience in practical life. Those who were not college graduates were admitted to the class if their tastes and previous attainments qualified them to profit by it.

In September, 1912, the Loyola University Lecture Bureau was organized to give extension lectures of a popular nature on social subjects. During the year over one hundred addresses were given by a staff of special lecturers in various parts of the city and the surrounding territory. The interest which these lectures aroused paved the way for systematic courses from October, 1913, to April, 1914. In these courses one hundred and sixty lectures were given, embracing General Economics and Sociology,

Social and Legal Ethics, and Social and Industrial Reorganization. Some of the courses were so well attended that the Law School lecture room could not accommodate the attendance, and Schiller Hall was secured. In September, 1914, a permanent school of sociology will have been established.

LOCATION.

Owing to its location in the heart of a great city, the school is enabled to give an ideal course which combines theory and practice. As many of the lecturers are engaged in social work, they bring to the class room that experience which is necessary to illustrate the principles and that interest which daily contact with social service inspires. The school co-operates with various public and private civic and social organizations.

THE SCHOOL YEAR.

The Curriculum is of two academic years, so arranged that either one or two years may be taken without unnecessary repetitions or want of continuity.

The school year is divided into three sessions, each of ten weeks duration, beginning the first week in October, and ending the first week in June, with an extended mid-winter vacation. Students are admitted at the beginning of any session. Day courses are conducted every day (except Saturday) from 4:00 to 6:00 P. M. Evening courses, every Friday, from 6:30 to 9:00 P. M.

ENTRANCE REQUIREMENTS.

All candidates for admission must be over eighteen years of age, and must have a four years high school education or its equivalent. To this must be added two or more years of recognized college work or practical experience of a nature equivalent to the same. Satisfactory evidence of good character and earnest study must likewise be presented with registration data.

REGULAR STUDENTS.

Regular students are those who take all the day courses and who are candidates for a B. S. degree or a Certificate in Social

Economy, according to their previous qualifications and college credits. Each student must, during each week, give ten hours to lectures and fifteen hours to field work. The course is completed in two years.

SPECIAL STUDENTS.

Special students are those who take any of the courses offered provided that not less than four lectures per week are attended. College credits towards a degree or a Certificate in Social Economy will be given for these courses provided the attendance has been regular, and a satisfactory thesis is presented.

SCHOLARSHIPS.

Three scholarships for the regular course and five scholarships for the special course are offered for 1914-1915, to students who have college degrees or have exceptional scholarship records. These scholarships are at the disposition of the faculty, and provide free tuition only.

METHODS OF INSTRUCTION.

The methods used are those of lectures at the school, private research, and practical work under the direction of well established social agencies, with expert supervision. Charts, Stereopticon views and Moving Pictures are also used to advantage.

FIELD WORK.

This practice work is of equal importance with the lectures, and hence fifteen hours per week are required from all regular students. The latter are assigned as apprentices to study methods and the technique of treatment, to some of the leading public and private civic and social institutions.

VISITS OF INSPECTION.

At stated intervals visits of inspection are made to the different institutions with whose work the student should be acquainted, such as the Juvenile and Morals Courts, the House of Correction, the Good Shepherd Convent, St. Mary's Industrial and Training School, St. Charles School for Boys, Geneva School for Girls, etc

LIBRARY.

A select library of over one thousand books and pamphlets, treating every phase of sociological problems, will be at the disposal of special as well as regular students. The Chicago Public Library and the Crerar Library are less than four blocks from the school.

EXPENSES.

For regular students the matriculation fee will be $5.00, and the tuition for each term $20.00. For special students the tuition will be $10.00 for each course of forty lectures, that is, four lectures each week for ten weeks.

Tuition is payable in advance at the beginning of each session. Students who fail to obtain a card from the registrar within ten days after the opening of the session will be debarred from the privilege of the classes.

Fees are in no case refunded, but students who have paid tuition and have become unable through sickness or any other unavoidable cause, to attend, will be credited the amount on any subsequent session which they may attend.

Students will be permitted to take special examinations for the removal of conditions, but will be required to pay a fee of $5.00 for such examination.

All financial obligations must be met before examinations may be taken or diplomas or certificates conferred.

For the benefit of out-of-town students, the following estimates are submitted:

	Low.	Average.	High.
Tuition	$ 60.00	$ 60.00	$ 60.00
Board and room	120.00	160.00	180.00
Laundry	15.00	20.00	30.00
Books and stationery	15.00	20.00	30.00
Incidentals	40.00	60.00	80.00

Students may apply to the Registrar for information and direction as to desirable board and lodging.

RESIDENCE IN INSTITUTIONS.

Students of limited means and vigorous health might arrange

through the registrar to find residence in one or other of the social institutions of the city. During the Christmas vacation such students might profitably find temporary employment.

Outline of Courses

(For 1914—1915.)

ECONOMICS.

A. 1. Definitions—Methods—Schools—Liberalism—Socialism—Solidarism—Rights of Property—Wealth—Price—Production (nature, labor, capital). Money—origin and functions. Coinage—Bimetallism—Monometallism. Consumption and Distribution—Rent—Profits—Interest—Wages.

A. 2. Credit—Banks and Banking—American and Foreign. Currency laws and federal banks. Emergency Currency. International Commerce. Balance of trade and accounts. Customs and imports. Protection and Free Trade.

A. 3. Transportation—evils and remedies. Private and Government ownerships. Corporations, advantages and limitations. Trusts and monopolies. Restrictions and remedies for evils. Interstate trade commission and federal control. Taxation—Revenue—Public Debts. Insurance.

ETHICS.

B. 1. General Ethics—Man, his nature and ultimate destiny. Human actions and the principles of morality. Virtues and passions. Laws—eternal, natural, positive. Civil law and Conscience. Obligation, promulgation and sanction of law. Utilitarianism.

B. 2. Natural Law—rights and duties in general. Duties to God, to self and to fellowman. Religion and self-love. Malice of homicide, lying and theft. Private ownership—rights—titles and violations. Transfers of rights, land and labor. Right to work and wages.

B. 3. Society in general—domestic society—its rights and duties. Unity and indissolubility of marriage. Divorce, absolute and rela-

tive. Education and the State. Civil Society, origin and necessity. Forms and functions of government. Civil sanctions and capital punishment. Tyranny and anarchy. International law.

HISTORY OF SOCIAL REFORM.

C. 1. Primitive reforms—Mosaic laws and regulations. Social activities in Oriental, Greek and Roman history. Christianity and its social value. Communism in the early Church. Social reforms of early popes. Educational and social work of the first religious orders. The parish a training for citizenship.

C. 2. Medieval Reforms—the democracy of the Church. Rise of labor guilds; the position and condition of labor. Technical education of the masses; Universities, public and industrial schools. Hospitals and organized charities. Poverty and wages; health and housing. Old age pension and social insurance. Day nurseries and state loan agencies.

C. 3. Modern Reforms. Europe in 17th and 18th centuries. The impoverishment and degradation of the masses. Poor Laws. The industrial revolution and rise of organized labor. Unrest and legislative reforms. Workingmen's Compensation. Compulsory insurance and old age pensions. Law and tax reforms. Health, housing, court and prison reforms.

SOCIAL REORGANIZATION.

D. 1, 2, 3. First principles concerning the family, the individual and the state. Application of Christian principles and practice to modern social conditions and tendencies. Reforms private and civic; purposes and methods of investigation, interpretation and treatment. Special study of defective, delinquent and dependent wards of the State. The organization and administration of public and private institutions.

INDUSTRIAL REORGANIZATION.

E. 1, 2, 3. The causes and factors of modern labor problems; relations of employer and employee; social and religious aspects of economic questions; the living wage, safe and sanitary labor conditions; Labor legislation; Sunday rest, workingmen's compensa-

tion, housing and transportation, immigration, unemployment, social insurance, etc.

SOCIAL STATISTICS AND FIELD WORK.

F. Statistics as a factor in the field of social study. Social resources and liabilities studied in official reports and private investigations. Collection and tabulating of data. Methods of acquiring facts, weighing and interpreting evidence. Particular cases are taken, studied and discussed.

RACE PROBLEMS.

G. Problems of population, political, economic and social causes and effects. Birth and death rates, infant mortality, race suicide, disease, war, alcoholism, eugenics and sex hygiene. Immigration —methods of assimilation and restriction, colonization. Asiatic and negro problems.

THE CHURCH AND SOCIAL SERVICE.

H. The social value of religion. The function of the Church in modern social problems. Relief and preventive agencies of social service in the Church, especially the religious orders of men and women—hospitals, houses of correction, orphanages and asylums. Organizations such as Society of St. Vincent de Paul and others.

HEALTH AND HOUSING.

I. The problems of municipal health, infectious and contagious diseases, public and private hospitals and nursing, water and milk supply; public baths, sewerage and garbage disposal, care of streets and parks; building and housing reforms. Tuberculosis. Social diseases.

PHYSICAL AND PSYCHIC FACTORS IN DEPENDENCY AND DELINQUENCY.

J. Biologic aspects of inferior and anti-social elements—age—sex—disease—heredity—education—environment—race traits and personal habits. General and individual conditions, physical,

mental and nervous allied to dependency and delinquency. Private and public methods of reform. Psychopathic institutes. Prison reforms.

CHILD WELFARE.

K. Infant and child welfare in public and private institutions, birth registration, medical inspection and compulsory education. Care of defective, dependent and delinquent children. The child in industry and child labor legislation. Children's aid societies. Recreation—playgrounds and social centers.

PROBLEMS OF LOCAL GOVERNMENT.

L. 1, 2. The sphere, duties and methods of modern local government. Problems of social and civic welfare, with special reference to tenements, health, housing and transportation; the prevention and treatment of crime. City planning and municipal owership of common necessities.

PROBLEMS OF NATIONAL GOVERNMENT.

L. 3. Centralization and socialization of modern governments. Governmental restraint and control of commerce and manufacture. Economic and social effects of departments of agriculture and labor. Pure food laws—and labor legislation.

SOCIOLOGY.

(Evening Courses.)

THE SOCIAL PROBLEM.

M. 1. Economic evolution—Liberalism and Socialism. The factors of solution—the individual, the state, the church—Solidarism.

THE LABOR QUESTION.

Conditions and reforms—relation of employer and employe—wages—strikes—lockouts—boycotts—arbitration and conciliation. Labor Unions and Manufacturers' Associations—Private reforms—Industrial betterment. Legislative reforms—Minimum wage—

Workingmen's Compensation—Labor hours and Sunday rest—Moral and sanitary enviroment—woman, child and immigrant labor—Compulsory insurance—death—disability—unemployment. Health, housing and transportation. Co-operative Societies—the small factory and handicraft. Vocational education. Religious influences.

COMMERCIAL AND INDUSTRIAL PROBLEMS.

M. 2. Competition—law of demand and supply. Trusts and Monopolies—economic and social advantages and dangers. Moral and legislative restrictions. Railroad evils and government ownership. Interstate Commerce and Federal Control. Currency legislation, profits, rents and interest.

PROBLEMS OF GOVERNMENT.

National and local—poverty and pauperism and crime. Tuberculosis and occupational diseases. Social and Sex Hygiene. The social evil and white slave traffic. Charity and philanthropy defectives, dependents and delinquents. Modern methods of investigation, interpretation and treatment.

THE AGRARIAN PROBLEM.

Conditions and objects of reform. Social agencies and agricultural schools. Scientific and monetary government aid. Back-to-the-land movement and Colonization of Immigrants. Preservation of National resources.

THE WOMAN PROBLEM.

The general movement—woman's place in society—her present condition—Suffrage and reform. Woman in industry and domestic service. Higher, vocational and co-education. Christianity and the exaltation of woman.

ETHICS.

(Evening Courses.)

A course in general and special ethics with particular application to legal practice.

Definition. Scope. Object-matter. Relation to other sciences. Postulates.

The human act. Knowledge and free-will. Obstacles to voluntariness of acts. Imputability.

The end and the good. The last end. The real and apparent good. The highest good. The pursuit of happiness.

Moral good and moral evil. The essence of morality. False views—Positivists, Utilitarians, Sensists, Rationalists. Moral Realism. The determinants of morality.

Law. Requisites for a moral law. The eternal law. The natural law—its properties. Ultimate basis of obligation. Relation to positive law.

The proximate, subjective norm of morality. Moral conscience. Probabilism.

Moral power and moral obligation. Rights and duties. Basis, connotation, distinction. The so-called rights of animals. Collision of rights.

Duties to God. Religious worship; interior and exterior, private and public.

Duties in respect of self. Extremes of egoism and altruism. Personal duties regarding the soul, the body, external goods, reputation, liberty of action, material possessions. Suicide. Veracity and the obligation of keeping secrets.

Duties to others—to respect their rights to health, integrity physical and moral, life, reputation, property. Neglect of these duties or the violation of corresponding rights. Protection against unjust aggression. The moderation of blameless defense.

The rights of ownership. Basis. Realization. Titles. Socialism.

Society; conjugal, parental, industrial, civil. Unity and indissolubility of matrimony. Parental right in education. Employer and employee.

Nature and origin of civil society. The social compact. Nature of civil authority—its origin. Designation of governing power.

Functions of government; legislative, judicial, executive. The right of the sword. Capital punishment. War.

Qualities of laws. Their enactment, application, enforcement.

Qualifications of legislators. Justice and expediency primary considerations in passing of laws. Unnecessary multiplication of statutes. Caution against retroactive laws.

The dignity of Judge's office. Requirements. Ordinary function. Doubt, in civil cases—in criminal cases. Self-protection against the attempt to influence or corrupt.

The lawyer's duty toward the profession. Knowledge required. What he owes to the Court; opposing counsel; client. The undertaking of doubtful cases, civil, criminal. Means and method. Fee. A rule of conduct.

Register of Students, 1913-1914

Each course represents forty lectures. Courses 1 and 2 were on Social and Industrial Reorganization respectively. They were day lectures and given at Schiller Hall, 64 West Randolph St. Courses 3 and 4 were on Social Economics and Social and Legal Ethics and were given in the evening in the rooms of the Loyola University Law School in the Ashland Block.

NAME.	COURSES.	OCCUPATION.
Mrs. Charles Ackhoff	1	
Grace E. Alexander	2	Teacher, P. S.
Mary Amberg	1 and 2	Head, Guardian Angel Settlement
Annie L. Ashfield	1 and 2	Public Schools
Gretta Bailey	1	Probation Officer, J. C.
Rose Bange	1 and 2	Probation Officer, J. C.
Harry P. Beam	3 and 4	Clerk
Alfred C. Bosser	3 and 4	Clerk
William J. Bowe	3 and 4	Law Student
Julia S. Brennan	1 and 2	Probation Officer, J. C.
Mrs. M. R. Brundage	1 and 2	Probation Officer, J. C.
Alice L. Burns	2	Teacher, P. S.
Mrs. Thomas Burns	1 and 2	C. W. L. Protectorate
Margaret Butler	1	Policewoman
Minnie K. Cannon	2	Teacher, P. S.
Theresa A. Cannon	1 and 2	Social Worker
Winifred Cannon	2	Truant Officer, B. E.
Simon F. Casey	1 and 2	Teacher, P. S.
Agnes M. Cavanagh	2	Social Worker
Frances Clarke	1	Probation Officer
Kate Cleverdon, M.D.	1 and 2	Teacher, P. S.
John T. Cloghessy	3 and 4	Clerk
John E. Coogan	3 and 4	Student
Ella R. Connell, A.B.	1 and 2	Principal, Gray School
Frances E. Coss	1 and 2	Probation Officer, J. C.
Mary E. Cullum	1	Teacher P. S.
Anna Davern	1	Probation Officer, J. C.
Julia R. Doyle	1 and 2	Probation Officer, J. C.
Frances Duffy	1	Teacher, P. S.
Edward J. Dunlavy	3 and 4	Bookkeeper
Helena A. Dunne	1 and 2	Teacher, P. S.

NAME.	COURSES.	OCCUPATION.
Marie A. Dunne, A.B	1 and 2	Principal, Nobel School
John A. Dwan	3 and 4	Law Student
George F. Featherstone, Jr.	3 and 4	Clerk
Anna C. Finan	1	Policewoman
J. Ward Fitzpatrick	3 and 4	Law Student
Katherine Flood	1	Teacher, P. S.
Katherine A. Fox	1	Teacher, P. S.
Mazie Regina Fugate	1 and 2	Social Worker
Lillian Funk	2	
Margaret E. Gallagher	2	Teacher, P. S.
Rebecca Gallery	1	
Charles A. Gardiner	3 and 4	Law Student
Sallie G. Gaynor	2	Social Worker
Teresa Gilligan	1 and 2	Nurse Juvenile Court
Thomas J. Ginnane	3 and 4	Letter Carrier
Margaret Grace	1	Probation Officer, J. C.
Robert E. Graham	3 and 4	Law Student
Lillian Gray	2	Probation Officer
Zilpha M. Guilford	2	Probation Officer, J. C.
L. Frederic Happel, A.M.	2	Asst. Editor "New World"
P. W. Harrington	1	Police Officer, J. C.
Leo Harkins	3 and 4	Reporter
Lora E. Hartray	1 and 2	Probation Officer, J. C.
Blanche Harvey	1 and 2	Probation Officer, J. C.
Daniel F. Hayes, M.D.	2	Physician and Surgeon
Lucile Hoeny	1	
Frank P. Hogan	3 and 4	Law Student
Mary E. Horen	1 and 2	Probation Officer, J. C.
Frank M. Horstman, B.S.M.D.	3 and 4	Professor of Physiology
Josephine B. Hughes	1 and 2	Probation Officer, J. C.
Nora V. Hurley	1 and 2	Truant Officer, B. E.
Anna M. Hushin	1	Teacher, P. S.
Swan M. Johnson	3 and 4	Law Student
Margaret Johnson	1	
Elizabeth Joyce	2	Teacher, P. S.
Curt Juhl, A. B.	4	Law Student
Geraldine F. Karr	2	Censor of Morals, Police Dept.
Mrs. W. S. Kelly	1 and 2	St. Margaret's Home
Kevin Kelly	2	Truant Officer, B. E.
Mrs. J. L. Kennedy	1 and 2	Social Worker

NAME.	COURSES.	OCCUPATION.
Michael Killgallon	3 and 4	Law Student
Patrick R. Layman	3 and 4	Stenographer
Margaret Leonard	1 and 2	Truant Officer, B. E.
Cecilia Lewis	1	Probation Officer, J. C.
Mary L. Loftus	1 and 2	Probation Officer, J. C.
Fannie E. Lynch	2	Supervisor of Music, B. E.
Mary E. Lynch	1 and 2	Probation Officer, J. C.
Rev. Frederick M. Lynk	2	Editor, Techny, Ill.
Katherine Madden	1	Teacher, P. S.
Margaret Madden, A.B.	1 and 2	Principal, Haven School
Sylvia Maginn	1	Probation Officer, J. C.
Xenia Maginn	1	Student of Domestic Economy
Elizabeth Mangan	2	Ill. Free Employment Agency
Mary E. Martin	1 and 2	Probation Officer, J. C.
Edward T. McCaffrey	3 and 4	Law Student
Amelia I. McDonnell	1 and 2	Teacher, P. S.
Anna K. McLaughlin	2	Teacher, P. S.
May McLaughlin	2	Music Teacher
Eleanor McGoorty	1	Probation Officer, J. C.
Philip H. McGrath, LL.B.	1 and 2	Lawyer and Social Worker
Mary E. McGinnis	1 and 2	Probation Officer, J. C.
James P. McManus	3 and 4	Law Student
Thomas McTaggart	3 and 4	Salesman
William C. McTaggart	3 and 4	Clerk
Celia McQuirk	1 and 2	Probation Officer, J. C.
Edwin P. Meister	3 and 4	Teacher, Loyola Academy
Llewellyn C. Merrill, B.S.	3 and 4	Medical Student
Austin F. Minogue	1 and 2	Probation Officer, J. C.
Mrs. C. E. Moore, B.S	1	Truant Officer, B. E.
Alice G. Mulcahy	1 and 2	Compulsory Dept., B. E.
Anna F. Mullay, Ph.B.	2	Principal, Sullivan School
Ellen F. Mullen	1 and 2	Probation Officer, J. C.
Alice Murphy	1 and 2	Probation Officer, J. C.
Elizabeth M. Murphy	2	Teacher, P. S.
Loretta T. M. O'Brien	1 and 2	Teacher, P. S.
Rose M. O'Brien	2	Teacher, P. S.
Katherine O'Connell	1	Teacher, P. S.
John F. O'Connor	3 and 4	Stenographer
Elizabeth O'Dea	1 and 2	Teacher, P. S.
Agnes O'Donoghue	2	Chicago Public Library

NAME.	COURSES.	OCCUPATION.
Minnie E. O'Donoghue	2	Teacher, P. S.
Eugene F. O'Riordan, LL.B.	3 and 4.	Lawyer
Francis B. O'Grady	3 and 4.	Stenographer
Edward J. O'Hara	3 and 4.	County Relief Investigator
Anna M. Olson	1	Teacher, P. S.
John M. Pakenham, LL.B.	3 and 4.	Lawyer
J. Fay Philbin	3 and 4.	Bookkeeper
Jesse Phillips	3	Clerk
Mary O'Brien Porter, M. D.	1 and 2.	Physician and Social Worker
William A. Porter, M.D.	1 and 2.	Physician
Leo E. Pryor	3 and 4.	Stenographer
Katherine Quigley	1	Settlement Worker
Edward Quinn	3	Law Student
Richard H. Regan	3 and 4.	Clerk
Thomas F. Reilly	3 and 4.	Clerk
Sarah E. Riley	1	
Nellie O. Russell	1	Probation Officer, J. C.
Anna Sepple	1 and 2.	Probation Officer, J. C.
Thurber M. Smith, A.B.	4	Teacher
Andrew G. Stefanak	4	Law Student
John Stevens, M.D.	3 and 4.	Physician
George Suffansky	3 and 4.	Law Student
Clarence M. Sullivan	3 and 4.	Newspaper Correspondent
Eugene T. Sullivan	3 and 4.	Clerk
William C. Sullivan	3 and 4.	Law Student
Edward P. Summers	2	Truant Officer, B. E.
Emmett Trainor	3 and 4.	Law Student
Michael Tremko	3 and 4.	Clerk
Rose Turk	1 and 2	
J. Edward Twomey, A.B.	3 and 4.	Law Student
Charles E. Van Den Broeck	3 and 4.	Clerk
Walter A. Wade	3 and 4.	Clerk
Adelaide Walsh	2	Director Social Service, C. M. Hospital
Max West	1	Probation Officer, J. C.
Margaret M. Wilson	1 and 2.	Policewoman
A. Mae Yegge	2	Social Service, Children's Hospital

Total number of Students..... 147

The Scientific Study of Religion

1. THE CHRISTIAN REVELATION AND ITS CREDENTIALS.

The Nature of Revelation. The Credentials of Revelation. Pre-Christian Revelations. The Christian Revelation. Records of the Christian Revelation. Credentials of the Christian Revelation. The Spread of Christianity a Moral Miracle.

2. THE CHURCH, THE TEACHER OF REVELATION.

The Formation of the Church. The Doctrinal Treasures of the Church: The Holy Scriptures, Tradition.

The work to be done by the Church. Marks by which the True Church is to be known: Unity, Sanctity, Catholicity, Apostolicity. Which Church has these marks. Constitution and Functions of the Church. The Head of the Church. The Church and the Civil Authority. Submission to the Church by Faith. Claims of the Catholic Church.

3. THE DOCTRINES OF THE CATHOLIC CHURCH.

(1). The Historic Creeds of the Church. The Existence of God. Refutation of Traditionism. Atheists Inexcusable. Metaphysical, Physical and Moral Proofs of God's Existence. The Perfections of God. He is Incomprehensible, Ineffable, Most Simple, a Spirit, Immense, Omnipresent, Immutable, Eternal. Operative Attributes of God: Objects of His Knowedge, Absolute Power of God. Will of God: Antecedent Will, Consequent Will. Moral Attributes of God: His permission of Evil.

(2). The Holy Trinity. A Mystery. Distinction between Nature and Person. Knowledge of the Mystery in the Old and the New Law. The Three Persons Really Distinct. Arianism Refuted. Macedonianism Refuted. Relation of the Persons. Proper Terms. Appropriation of Terms.

(3). The Creation of the World. The Beginning of Time. Scripture and Science on the Six Days. The Angels. Guardian Angels. The Fallen Angels. Their influence on Man. The Origin of Man. Nature of Man. Theory of Evolution: Theistic, Atheis-

tic. Descent from Adam. Age of Mankind. Supernatural Elevation of Man. The Fall of Man and Its Consequences.

(4). The Incarnation of the Son of God. The Two Natures. The One Person. Atonement and Redemption. The One Mediator. Honor Due to Christ. The Sacred Heart.

(5). Effects of the Redemption. The Nature of Grace. Kinds of Grace. Actual Grace Necessary for All Men. Intended for All Men. Grace and Free Will. Habitual Grace. Lutheranism. Calvinism. Jansenism. Merit, the Fruit of Grace. Increase of Merit. Loss of Merit.

(6). Sources of Grace: the Sacraments. Nature of Sacrament. Sacramentals. Number and Kinds of the Sacraments. Baptism: Its Matter and Form. Modes of Administration. Minister and Subject. Effects of Baptism. Infant Baptism. Baptism of Desire. Of Blood. Confirmation. The Holy Eucharist: as a Sacrament, as a Sacrifice: the Mass. Institution. Transubstantiation. Holy Communion. Real Presence. Effects. Penance. Forgiveness of Sins. Institution and Use of this Sacrament. Confession. Effects, Indulgences. Extreme Unction. Holy Orders a True Sacrament. Its Matter and Form. Anglican Orders. Major and Minor Orders. Jurisdiction. Celibacy. Vocation. Matrimony. Laws Laid Down by Christ. A True Sacrament.

(7). The Four Last Things. Death, Judgment, Hell, Heaven. The Beatific Vision. Purgatory. General Judgment. Resurrection of the Body.

4. DUTIES OF CATHOLICS.

Duties in General. Each of the Ten Commandments and of the Commandments of the Church Explained. Prayer. Devotion to the Blessed Virgin Mary.

Loyola University

Department of Engineering

1914

Address: The Registrar or the Dean
Loyola Avenue and Sheridan Road, Chicago, Illinois
Telephone Rogers Park 620

Officers and Faculty

JOHN L. MATHERY, S. J., President of the University.

HENRY S. SPALDING, S. J., Regent.

ADOLPH ANTON NEFF, B. S., M. E., Dean.

PAUL BREEN, S. J., Treasurer.

WILLIAM H. CAHILL, A. M., C. E., Professor of Civil Engineering.

ADOLPH ANTON NEFF, B. S., M. E., Professor of Mechanical Engineering.

JOHN K. MOORE, A. M., Lecturer on Construction.

MICHAEL JOSEPH MILMOE, M. E., Lecturer on Machine Design.

PAUL V. HYLAND, Lecturer on Architecture and Building Construction.

LOUIS J. PUHL, S. J., Professor of Chemistry.

THOMAS A. KELLY, S. J., Professor of Mathematics.

FREDERIC SIEDENBURG, S. J., Professor of Economics and English.

PHILIP FROEBES, S. J., Professor of German.

ERNEST MCCULLOUGH, C. E., Consulting Engineer, Chicago, Ill.

ARNOLD D. MCMAHON, A. M., L.L. B., Secretary and Professor, Loyola University Law School.

WILLIAM STETSON MERRILL, A. M., Chief Cataloger, Newberry Library, Chicago, Ill.

G. LEO PLEINS, Consulting Sanitary Engineer, Chicago, Ill.

LECTURERS' SCHOOL OF ENGINEERING

LOYOLA UNIVERSITY

LOUIS A. FERGUSIN, First Vice-Pres. Commonwealth Edison Co., Graduate Boston Tech., one of the leading Authorities on Electrical Illumination.

PERCIVAL C. ABBOTT, Mechanical Engineer in Chief to the Edison Corporation.

GEORGE WEBSTER DAILEY, Chief Sup't of Division, Milwaukee and Wisconsin Division, Chicago and North-Western Railway.

WILLIAM H. FINLEY, Ass't Chief Engineer, Chicago and North-Western Railway Co.

EDWARD B. ELLICOTT, Ass't Chief Engineer, Chicago Drainage Canal and Sanitary District; Engineer to be assigned for lectures by the Public Safety Corporation of Illinois.

Calendar

First Semester, 1913-14.

1913.

Sept. 27 ..... Entrance and conditional examinations.
Sept. 29 ..... Registration days.
Sept. 30 ..... Instruction begun.
Oct. 12 ..... Columbus Day. (Holiday.)
Nov. 28 ..... Thanksgiving recess begun.
Dec. 23 ..... Christmas vacation begins.

1914.

Jan. 3 ..... Instruction resumed.
Jan. 28-30 ..... Final examinations of First Semester.

Second Semester, 1913-14.

Jan. 31 ..... Registration day.
Feb. 3 ..... Instruction begun.
Feb. 22 ..... Washington's Birthday. (Holiday.)
May 28 ..... Final examinations begun.
May 30 ..... Memorial Day. (Holiday.)
June 2-28 ..... Field work in Surveying.
June 21 ..... Commencement.

First Semester, 1914-15.

1914.

Sept. 24 ..... Entrance and conditional examinations.
Sept. 28 ..... Registration days.
Sept. 29 ..... Instruction begun.
Oct. 12 ..... Columbus Day. (Holiday.)
Nov. 26 ..... Thanksgiving recess begun.
Dec. 23 ..... Christmas vacation begins.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to the College of Engineering must be at least sixteen years of age, must present satisfactory testimonial of good moral character, and must be qualified in fifteen units of entrance subjects as enumerated below.

NOTE.—A unit represents the equivalent of five prepared recitations a week for one scholastic year in a single subject.

The prescribed units are:

English	3 units
History	1 unit
Elementary Algebra	1 unit
Advanced Algebra	½ unit
Plane Geometry	1 unit
Solid Geometry	½ unit
Elementary Physics	1 unit
Total	8 units

Electives sufficient to make up the required fifteen units may be offered from the following list:

Latin	2 to 4 units
Greek	1 to 3 units
German	2 to 3 units
French	2 to 3 units
English	1 to 2 units
History	1 to 2 units
Higher Algebra	½ unit
Plane Trigonometry	½ unit
Elementary Chemistry	1 unit
Biological Science	1 to 2 units
Manual Training	2 units

Admission may be secured in one of the following ways:

1. BY EXAMINATION.—Entrance examinations will be held at the university in June and September. See Calendar.

2. BY CERTIFICATE.—Graduates from standard high schools or other approved preparatory schools will be admitted on presentation of official certificates exhibiting the number of merits to which the applicant is entitled in each subject of the preparatory course pursued.

3. From Other Colleges.—Students from other institutions, whose entrance requirements and courses are substantially equivalent to those of Loyola University, will, upon presenting proper certificates of good standing and honorable dismissal, be admitted to advanced standing without examination and be given credit for the work done in such institutions.

4. As Special Students.—Persons over 19 years of age, not candidates for degrees, will be admitted as special students, provided they give evidence of preparation for the subjects desired. Such students may become candidates for degrees by passing the examinations prescribed for entrance.

FEES AND EXPENSES.

Matriculation fee	$ 5.00
Tuition	100.00
Diploma fee	10.00
Engineering laboratories, per credit, per semester	2.50
Physical and chemical laboratories, per credit, per semester	2.50
Surveying, field work, per semester	3.00
Summer course in surveying, 2 weeks	12.50
Summer course in surveying, 4 weeks	25.00
Breakage deposit (Chemistry)	10.00

The matriculation fee is paid only once. The tuition fee is payable in two installments: $50.00 on October 1st and $50.00 on February 1st; ten days of grace are allowed. At the end of that time non-payment debars from classes.

No rebate is allowed on tuition paid, but when a student is forced, for valid reasons, to withdraw from college, the balance of the tuition representing that part of the semester for which he is absent may be redeemed in any other department studies within one year from date of withdrawal from the college.

Any balance remaining at the end of each year from the deposit required to defray the expense of breakage in the chemical laboratories will be refunded or credited for the succeeding year at the option of the student.

The college provides no dormitory system for students. Board and rooms may be obtained in the vicinity of the college at reasonable rates.

Further information may be obtained from the Registrar or the Dean of the College of Engineering.

The Courses of Study

The outlines of the courses which follow, and the formulation of their requirements, rest on the well founded theory that successful endeavor in any field of engineering activity depends primarily on thorough theoretical and practical training in the fundamental sciences on which modern engineering practice is based. To give such training as may lead to future usefulness on the part of its students, and to develop in them the power to attack and solve new engineering and scientific problems, is the purpose of the instruction offered in the College of Engineering. The work, therefore, in all the courses outlined, is mostly prescribed, and, because of the correlation and interdependence of the professions for which training is provided, a large proportion of the studies—modified in form and extent to meet the general requirements of the individual courses—are taken in common by all students.

Contemporary engineering practice has assumed many phases of specialization within the rather comprehensive fields of civil, mechanical, electrical, and chemical engineering in the general acceptation of the terms. No one may hope to become expert in more than a very few of the various lines classified under one or another of these broad divisions. Though specialized practice is the order of the day, it is very generally recognized that extreme latitude in the election of special technical studies, in connection with the courses offered, is not conducive to sound engineering education, and tends to defeat the real purpose of engineering training. There are therefore included as elective only a comparatively small number of such special technical subjects as are admittedly valuable in affording desirable general scientific training and promoting immediate average efficiency along broad lines of professional activity.

Note: Courses in Sanitary and Architectural Engineering are in preparation.

Considerable importance is attached to English, German, French, Logic, and Economics, which are included as prescribed studies and designed to accord with the other work of the courses. The requirement in English will not be considered satisfied by the completion of the work of the first year. Instruction will be resumed and continued for as long a period as may seem necessary in the case of any student who shows subsequent inability to express himself clearly, accurately, and effectively.

Frequent visits of inspection, according to prearranged schedule under the guidance of instructors, will be made to convenient manufacturing and industrial establishments, power plants, public works, the sites of important pieces of construction, and other points affording opportunities for stimulating the student's interest and increasing his knowledge. Such visits, besides familiarizing him in a general way with the significance of productive and constructive engineering and lending themselves to his acquirement of exact habits of observation, will afford a basis for written work in which rhetorical and technical instruction may be advantageously combined.

In line with the foregoing, the work in all the courses is identical during the first year, and there is little divergence during the second year. The student is thus afforded an opportunity for self-adjustment, and the danger of premature choice of profession, which is a factor to be reckoned with, is decreased; but he will have become habituated to the scientific methods of thought and procedure so important in the prosecution of his further studies. In the third year the differentiation between the courses, not only as contributory and essential to professional tively advanced and more highly specialized work of the fourth year there is permitted the election of one of a number of groups of studies bearing on some specialty closely related to the course hitherto pursued. All such elections presuppose thorough qualifying preparation, and are subject to the approval of the Dean. The major emphasis, however, is laid on the prescribed studies in all the courses is more specific, and in connection with the comparasuccess, but as desirable elements in culture and in life.

Outline of Courses

FRESHMEN YEAR—COMMON TO ALL COURSES.

	First Semester.	Second Semester.
English	3	3
Logic	2	0
German or French	4	4
Chemistry	3	3
Drawing and Descriptive Geometry	3	3
Advanced Algebra	3	0
Trigonometry	3	0
Analytical Geometry	0	5
Elementary Surveying	0	3
	21	21

Surveying ..... 2 weeks
Shop work ..... 8 weeks

Civil Engineering

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Drawing	3	2
Geology	3	0
Economics	2	0
Advanced Surveying	0	4
Technical Mechanics	0	5
	21	21

Topographic Surveying ..... 4 weeks
Shop or field work ..... 6 weeks

JUNIOR YEAR.

Mechanics of Materials	5	0
Hydraulics	0	5
Materials Laboratory	2	2
Hydraulic Laboratory	0	1
Descriptive Astronomy	3	0
Geodesy	0	3
Roofs and Bridges	5	4
Railway Engineering	4	4
Roads and Pavements	2	0
Economics	0	2
	21	21

Railway Surveying (optional) ..... 4 weeks
Shop, field, or office work ..... 5 or 10 weeks

SENIOR YEAR.

	First Semester.	Second Semester.
Bridge Design	3	0
Water Supply	3	0
Sewerage	3	0
Heat-Power Machinery	3	0
Electrical Machinery	0	3
Mechanical and Electrical Laboratory	1	1
Reinforced Concrete	0	5
Masonry and Foundations	0	2
Engineering Problems	0	2
Economics	3	0
Contracts and Specifications	0	3
Elective	5	5
	21	21

Mechanical and Electrical Engineering

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Machine Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	6
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

JUNIOR YEAR.

Mechanics of Materials	5	0
Hydraulics	0	5
Materials Laboratory	2	1
Hydraulic Laboratory	0	1
Physical Laboratory	2	2
Heat-Power Engineering	3	3
Mechanical Laboratory	1	1
Electrical Machinery	3	3
Machine Design	5	3
Economics	0	2
	21	21

Shop work.....10 weeks

SENIOR YEAR. (MECHANICAL.)

	First Semester.	Second Semester.
Power Plant Design	3	3
Steam Machinery Design	3	0
Gas Machinery Design	0	3
Designing and Drawing	3	3
Mechanical Laboratory	3	3
Electrical Laboratory	3	0
Economics	3	0
Contracts and Specifications	0	3
Elective	3	6
	21	21

SENIOR YEAR. (ELECTRICAL.)

Power Plant Design	3	3
Electrical Engineering	6	6
Mechanical Laboratory	3	0
Electrical Laboratory	3	3
Economics	3	0
Contracts and Specifications	0	3
Elective	3	6
	21	21

Chemical Engineering

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Qualitative and Quantitative Chemistry	3	3
Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	3
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

JUNIOR YEAR.

Mechanics of Materials	3	0
Hydraulics	0	3
Materials Laboratory	2	1
Hydraulic Laboratory	0	1
Physical Laboratory	2	2

Quantitative Analysis	5	0
Organic Chemistry	5	5
Heat-Power Engineering	3	3
Mechanical Laboratory	1	1
Gas and Oil Analysis	0	3
Economics	0	2
	21	21

Shop or Laboratory Work.....10 weeks

SENIOR YEAR.

Industrial Chemistry	5	5
Physical Chemistry	2	2
Electro-Chemistry	2	2
Electrical Machinery	3	3
Economics	3	0
Contracts and Specifications	0	3
Elective	6	6
	21	21

Description of Courses

ENGLISH.

The object of the instruction is to enable the student to express himself clearly, concisely, accurately, and vigorously, special stress being laid on those parts of rhetoric which will be of greatest value to engineering students. The written exercises are designed to accord with the other work of the courses. Students are instructed in the use of the library collections.

1. A course in rhetorical theory and practice, with essays based on the lives of distinguished scientists and visits of inspection.

Freshman; 1st semester; 3 credits.

2. A continuation of course 1, with essays based on assigned technical readings and visits of inspection.

Freshman; 2nd semester; 3 credits.

3. A conditional course supplementing the work of 1 and 2, and consisting wholly of theme work and consultation.

Required only of students who show inability to write clear and correct English. It will be continued until a satisfactory degree of proficiency is attained.

FRENCH AND GERMAN.

All students are required to take one year of work in either French or German. Elementary and advanced courses will be offered in each and the student may elect either. For outlines and descriptions of these courses see Bulletin of the College of Arts and Sciences.

MATHEMATICS.

1. Advanced Algebra.—A brief review of the foundations with graphic representation and of the theory and use of logarithms, followed by a treatment of permutations and combinations, theory of limits, series, undetermined coefficients, determinants, theory of equations, complex numbers.

Freshman; 1st semester; 3 credits.

2. Trigonometry.—The trigonometric functions and their relations; proofs of the principal formulas of plane trigonometry; proofs of formulas and solution of all cases of right and oblique plane triangles; computation of areas.

Proofs of principal formulas of spherical trigonometry; formulas and solutions for right and oblique spherical triangles.

Freshman; 1st semester; 3 credits.

Numerous dependent problems and applications.

3. Analytic Geometry.—Graphic representation; the straight line; conic sections; higher plane curves; the essentials of Solid Analytic Geometry. Considerable problem work is required.

Freshman; 2nd semester; 5 credits.

4. Differential and Integral Calculus.—The direct and inverse operations are carried on in parallel. The fundamental formulas and methods of differentiating and integrating are followed by a geometric treatment of maxima and minima; applications to curves, surfaces, and volumes are considered. Taylor's Theorem and the subject of series in general will be treated in the second semester, together with the applications of the calculus to the engineering sciences. Some attention will be given to the subjects of Hyperbolic and Elliptic functions. Considerable problem work is exacted.

Sophomore; 1st semester, 5 credits; 2nd semester, 3 credits.

5. Differential Equations.—The purpose of the course, which is supplementary to course 4, is to familiarize the student with the types of equations ordinarily encountered in the study of the engineering sciences, and to indicate the principles and methods employed in their solution. The solution of numerous problems will be made a leading feature of this course.

Sophomore; 2nd semester, on completion of course 4; 2 credits.

ASTRONOMY.

1. Descriptive Astronomy.—A study of the fundamental facts and principles of the subject, with observatory practice.

Junior; 1st semester; 3 credits.

GEOLOGY.

1. General Geology.—A presentation of the general principles of geology and their practical applications. The course will be arranged with special reference to the needs of engineering students. Occasional excursions will replace laboratory practice. Three lectures and one laboratory period per week.

Sophomore; 1st semester; 3 credits.

ECONOMICS.

1. Elements of Economics.—A general survey of economic theory and a discussion of present-day economic problems including wages, rent, interest, currency, banking, taxation, tariff, trusts, trades-unionism, socialism. Lectures and classroom discussions.

Sophomore; 2nd semester; 2 credits.

2. Organization and Management.—A study of American industries and a discussion of the methods of organizing, financing, and managing modern commercial institutions. The purpose of the course is to acquaint the student with the application of the general principles of economics to business life. Lectures, discussions, and field work.

Junior; 1st semester; 3 credits.

PHILOSOPHY.

1. Logic.—Formal logic or dialectics; definition, material and formal elements, kinds of reasoning, how to build an argument, analytic and synthetic methods. Material logic: truth, its nature and kinds, certitude, skepticism, cognoscitive faculties, authority, etc.

Freshman; 1st semester; 2 credits.

2. Psychology and Ethics.—Nature and properties of the human soul, cognoscitive faculties, intellect, will, liberty. General ethics, human action, morality, form of human action, divine and human laws. Applied ethics, rights and duties, right of property, socialism, society, law, etc.

PHYSICS.

1. General Physics.—A general course in the subjects of Mechanics and Heat; Light and Sound; Electricity and Magnetism. The methods of the calculus are employed to a considerable degree. Two lecture-demonstrations, two recitations, and two laboratory periods per week.

Sophomore; throughout the year; 5 credits per semester.

2. Physical Measurements.—A laboratory course, supplemented by twelve lectures on the theory and methods of precise thermal and electrical measurements, involving quantitative work in the use of various instruments of precision, and the determination of physical constants. A report of specified form is required on each experiment.

Junior; throughout the year; 2 credits per semester.

3. Practical Photography.—The principles and processes of dry plate photography, including lectures on photographic optics and laboratory work in the exposure and development of dry plates; printing processes, copying, enlarging, and the making of lantern slides.

Elective; second semester; 2 credits.

DRAWING AND DESCRIPTIVE GEOMETRY.

Note.—The freshman work in drawing and descriptive geometry is given as a combined course, but, in the cases of special students or of those admitted to advanced standing, separate courses may be given as follows:

1. Elements of Drawing.—Freehand lettering; sketching and dimensioning; geometrical construction; orthographic projection and isometric drawing; working drawings, including conventions, standards, etc.; tracing and reproductive processes. Notes and lectures on drafting room methods.

Freshmen; 1st semester; 3 credits.

2. Descriptive Geometry.—The descriptive geometry of points, lines, planes, surfaces, and solids. Tangencies, intersections, and developments. Shades and shadows and the principles of linear perspective. One lecture or recitation and two drafting periods a week.

Freshmen; 2nd semester; 3 credits.

MECHANICS AND HYDRAULICS.

1. Technical Mechanics.—The principles of Statics, Kinematics, and Kinetics, with technical applications. Analytic and graphic methods are used concurrently in the solution of problems.

Sophomore; 2nd semester; 5 credits.

2. Mechanics of Materials.—A study of the more important materials of construction, their manufacture, properties, and structural uses, and the theory of resistance to stress and deformation with applications to engineering design. Lectures and recitations.

Junior; 1st semester; 5 credits.

2a. Mechanics of Materials.—A briefer course than 2; arranged to meet the requirements in Chemical Engineering.

Junior; 1st semester; 3 credits.

3. Advanced Mechanics.—An advanced course supplementary to 2, and devoted to the treatment of such special topics as dynamical stability, the mathematical theory of elasticity, internal work and its derivatives, the theorem of least work, linear arches and curved beams. Lectures, problems, and applications.

Senior elective; 1st semester; 3 credits.

4. Materials Laboratory.—The laboratory practice will be adapted to the requirements of the individual courses and will include the various standard tests of the more important materials of construction. The work will be supplemented by lectures on the technique of testing, collateral reading, and reports carefully prepared according to a prescribed form.

Junior; throughout the year; 2 credits per semester.

4a. Materials Laboratory.—An advanced laboratory course, in continuation of the work of 4, devoted to testing and special investigations of materials of construction. Hours and nature of experimental work to be assigned in conference with the instructors concerned.

Senior elective; 1 to 3 credits per semester.

5. Hydraulics.—The theory of fluid pressure and equilibrium; the flow of water through orifices, weirs, tubes, pipes and channels, the theory of hydraulic measurements; hydraulic motors and machinery; naval hydromechanics. Lectures and recitations.

Junior; 2nd semester; 5 credits.

5a. A briefer course than 5, adapted to meet the requirement in Chemical Engineering.

Junior; 2nd semester; 3 credits.

6. Hydraulic Laboratory.—An experimental course to accompany 5, including logarithmic plotting, experiments with weirs, orifices, pipes, meters and nozzles; the testing of hydraulic machinery.

Junior; 2nd semester; 1 credit.

6a. Hydraulic Laboratory.—An advanced course in experimental hydraulics, including capacity and efficiency tests of hydraulic machinery. The hours of work will be by appointment, and some latitude will be allowed as to the nature of the experimentation.

Senior elective; either semester; 1 to 3 credits.

CIVIL ENGINEERING.

1. Elementary Surveying.—Lectures, recitations, field and office work covering the principles, uses, and adjustments of the engineer's level and transit, and the uses of the steel tape; topographic surveying with transit and stadia.

Freshmen; 2nd semester; 3 credits.

2. Advanced Surveying.—The application of the fundamental operations to city, land, mine, and hydrographic surveying; the use of the plane table and sextant; precise leveling and triangulation; including the measurement of base lines and angles; the determination of azimuth by solar observation. Lectures, recitations, field and office work.

Sophomore; 2nd semester; 4 credits.

3. Geodesy.—The principles of practical astronomy and their application in the determination of latitude, longitude, time, and azimuth with the engineer's transit and sextant. Methods of conducting geodetic surveys, and the application of the method of least squares to the adjustment of observations. The figure of the earth.

Junior; 2nd semester; 3 credits.

4. Summer Surveying.—The Summer courses in surveying are given at the close of the school year in June and are of a practical nature. The student will spend ten hours a day in the field or office in the performance of the various duties incident to the work of the surveyor. The courses in Elementary and Topographic Surveying are prescribed. The course in Railway Surveying and Location is optional. The periods allotted to these

courses are two weeks for Elementary Surveying, and four weeks each for Topographic and Railway Surveying.

5. Topographic Drawing.—The conventional methods of representing topography and the platting of the results of surveys.
Sophomore; 2nd semester; 2 credits.

6. Construction Drawing.—Stereotomy, dams, piers, arches, trestles, culverts, etc. Applications of Descriptive Geometry to engineering construction.
Sophomore; 1st semester; 3 credits.

7. Railway Engineering.—Lectures, recitations, field, and office work dealing with the subjects of railway location and construction. The theory of simple, compound, and transition curves, cross-overs, frogs and switches, turnouts, etc. Cross sectioning, the computation of cut, fill and haul; road bed construction, including ballast, track, culverts, trestles, etc. Estimates and costs.

The economics of location embracing a treatment of such topics as train resistance, the influence of grade, curvature, rise and fall; rolling stock and motive power; yards, stations, and terminals; street railways.
Junior; throughout the year; 4 credits per semester.

8. Railway Engineering.—A continuation of course 7, including a discussion of the economics of construction, a study of organization and management, maintenance of way, etc.
Senior elective; throughout the year; 2 credits per semester.

9. Railway Designs.—A conference and drawing room course in the proportioning of culverts and waterways, and the design of track layouts, yards, terminals, bridge masonry, and other railway structures.
Senior elective; 2nd semester; 3 credits.

10. Roads and Pavements.—The location, construction, and maintenance of roads, and the construction and maintenance of city streets and pavements, combined with a study of the materials used. Lectures, recitations, and collateral reading; visits of inspection and reports.
Junior; 1st semester; 2 credits.

11. Roofs and Bridges.—The analytic and graphic investigation of stresses in framed structures under various conditions of loading. Structural details. The design of a metal roof truss and of a plate girder, including general and detail drawings, bills of material, weights, and costs.
Junior; throughout the year; 1st semester; 5 credits; 2nd semester, 4 credits.

12. Bridge Design.—A continuation of course 11, involving the drafting room application of its principles to the design of simple riveted and

pin-connected truss spans, following the practice of leading bridge companies.

Senior; 1st semester; 3 credits.

13. Higher Structures.—A study of continuous, cantilever, suspension, and arch bridges; statically indeterminate structures. Lectures, computations, and drafting room work.

Senior elective; throughout the year; 3 credits per semester.

14. Steel Buildings.—The principles of construction of mill and high steel-skeleton buildings; computation of stresses and design.

Senior elective; either semester; 2 credits.

15. Reinforced Concrete.—The theory and design of beams, slabs, columns, retaining walls, dams, and other structures, and a critical study of the design and structural features of reinforced concrete arch types. The course is concluded by the complete design, including drawings, of a reinforced concrete arch.

Senior; 2nd semester; 5 credits.

16. Masonry and Foundations.—The course is given by lectures, recitations, collateral reading, and visits of inspection. Among the subjects treated are the materials of masonry; the construction of bridge piers, abutments, dams, retaining walls, etc.; ordinary, pile, and subaqueous foundations.

Senior; 2nd semester; 2 credits.

17. Water Supply.—The collection, purification, and distribution of water supplies for domestic and other purposes.

Senior; 1st semester; 3 credits.

18. Sewerage.—The collection, treatment, and disposal of sewage. Lectures, recitations, and inspection trips.

Senior; 2nd semester; 3 credits.

19. Sanitary Engineering.—A continuation of 18 and 19, the work being devoted principally to problems and designing related to water supply, sewer systems, and sewage disposal plants.

Senior elective; 2nd semester; 5 credits.

20. Hydraulic Engineering.—The application of hydraulic theory and principles to the investigation and development of water power; irrigation, river and harbor improvement; drainage and canalization. The design of hydraulic works, plants, and appliances.

Senior elective; throughout the year; 3 credits per semester.

21. Engineering Problems.—The application of fundamental principles to the investigation and solution of practical problems.

Senior; 2nd semester; 2 credits.

22. Contracts and Specifications.—The elements of business law and a survey of the law of contracts as applied to engineering work. A study of general and special clauses used in the various kinds of engineering specifications. Practice in the preparation of contracts and specifications.

Senior; 2nd semester; 3 credits.

MECHANICAL ENGINEERING.

1. Machine Drawing.—A continuation of Drawings 1 and 2, and the application of their principles to machine drawing and empirical design. Sketching and detailing machine elements from model and copy; the making and use of standard data sheets; detail assembly drawings of complete machines. The work is designed to familiarize the student with commercial drafting room practice, and is of distinctly vocational character.

Sophomore; 1st semester; 3 credits.

2. Kinematics of Machinery.—Lectures and recitations on the theory of mechanisms, instant centers, cams, gears, linkage, velocity and acceleration diagrams, etc.

Sophomore; 2nd semester; 3 credits.

3. Kinematic Drawing.—The graphic application of the principles of course 2. A series of separate problems of graded complexity will be assigned to each student.

Sophomore; 2nd semester; 3 credits.

3a. Kinematics.—A combined lecture, recitation, and drafting room course briefer than 2 and 3, and arranged to satisfy the requirement in the principles of mechanism for chemical engineering students.

Sophomore; 2nd semester; 3 credits.

4. Lectures, recitation, and drafting room exercises covering the application of the principles of Drawing, Kinematics, and Mechanics to the proportioning of machine elements and the designs of complete machines.

Junior; throughout the year: 1st semester, 5 credits; 2nd semester, 3 credits.

5. Heat-Power Engineering.—Lectures and recitations on the thermodynamics of gases and vapors as applied to heat engines; a study of fuels and the principles of combustion; boilers, engines, and auxiliaries. The indicator diagram. A detailed analysis of efficiencies and economies of various types of steam engines, gas engines, and turbines; valves and valve gears.

Junior; throughout the year; 3 credits per semester.

5a. Heat-Power Machinery.—A lecture and recitation course for civil engineering students, designed to impart a general knowledge of the structural features and operating characteristics of boilers and producers, steam

and gas engines and auxiliaries, pumping, hoisting, traction, and other machinery. The course is devoid of much technical detail.

Senior; 1st semester; 3 credits.

6. Mechanical Laboratory.—Introductory experimental work in the testing and calibration of gauges, indicators, integrating instruments, etc.; power measurements; fuel and gas analysis; oil testing; the determination of engine efficiencies and the testing of auxiliary apparatus.

Junior; throughout the year; 1 credit per semester.

6a. Mechanical Laboratory.—A continuation of course 6, the work including the testing and determination of efficiencies of steam engines, boilers, gas and oil engines, pumps, air compressors, refrigerating machinery, etc.

Senior; throughout the year; 3 credits per semester.

6b. Mechanical Laboratory.—An advanced experimental course open only to students who have completed the prescribed laboratory courses. Hours and nature of the work to be arranged.

Elective; either semester; 1 to 3 credits.

Note.—The work in experimental engineering is varied according to the courses. Each experiment will be followed by a carefully prepared report of specified form.

7. Power Plant Design.—A continuation of course 5. Lectures, recitations, and computations dealing with the types and principles of boilers; multiple expansion engines, and their auxiliaries and dependencies; gas engines; steam turbines, refrigerating machinery, and air compressors. The selection of elements and their combination in power plants.

Senior; throughout the year; 3 credits per semester.

8. Steam Machinery Design.—A study of types and proportions of steam engines; the indicator card; entropy—temperature and crank effort diagrams; the design of such details as valve gears, governors, and flywheels; the balancing of engines.

Senior; 1st semester; 3 credits.

9. Gas Machinery Design.—A study of modern gas engines and producers, and the designing of important details of internal combustion engines.

Senior; 2nd semester; 3 credits.

10. Designing and Drawing.—A drafting room course paralleling the work of 8 and 9. This course must be accompanied, or preceded by 8 and 9.

Senior; throughout the year; 3 credits per semester.

11. Steam Boilers.—A study of steam boiler types, fuels and furnaces; steam boiler computations, and the design of boiler details and accessories.

Senior elective; 1st semester; 3 credits.

12. Steam Turbines.—A general discussion of the types, principles, and economic and structural features of steam turbines; steam turbine calculations.

Senior elective; 2nd semester; 3 credits.

13. Compressed Air.—A study of the properties of air, the principles of air compressors, and the applications of compressed air.

Elective; 2nd semester; 2 credits.

14. Heating and Ventilation.—The fundamental principles of the subject, and their application to the design, construction, and installation of heating and ventilating systems.

Senior elective; 2nd semester; 2 credits.

15. Mechanical Refrigeration.—A study of the principles and methods involved in the artificial production of low temperatures, and a survey of the design, construction, and operation of refrigerating machinery and refrigerating systems.

Senior elective; 2nd semester; 2 credits.

ELECTRICAL ENGINEERING.

1. Electrical Machinery.—Lectures, recitations, and laboratory work dealing with the history of the subject, and the laws and properties of electric and magnetic circuits; electrical measurements; the theory construction and operation of direct and alternating current machinery.

Junior; throughout the year; 3 credits per semester.

1a. Electrical Machinery.—A briefer course than 1, arranged to meet the needs of civil engineering students.

Senior; 2nd semester; 3 credits.

2. Electrical Engineering.—Lectures, recitations, and computations on the theory and characteristics of electrical machinery, dealing in detail with the laws and properties of electric and magnetic circuits; direct and alternating current phenomena; transmission lines; generators, motors, transformers, converters, etc.

Senior; throughout the year; 6 credits per semester.

3. Electrical Laboratory.—Practice in the electrical laboratories will be continuous throughout the junior and senior years. The work will be of such nature as to meet the requirements of the individual courses. Opportunities for laboratory work of an advanced character will be afforded

to those who have completed the prescribed courses. The regular work will include the testing of instruments, generators, motors, transformers, converters, storage batteries, etc.; it will be supplemented by occasional lectures. A carefully prepared report on each experiment is required.

Throughout the year; junior, 1 credit per semester; senior, 3 credits per semester.

4. Telephone Engineering.—The theory and operation of telephonic apparatus and the application of the principles of electrical engineering to the design, construction, and maintenance of transmission lines, and to the investigation of problems in telephone engineering.

Senior elective; 1st semester; 3 credits.

5. Electric Railways.—The application of the principles of electrical engineering to the construction, operation, and equipment of various types of electric railway systems. The dynamics of train movement, and the plotting of speed-time curves, railway load curves, etc.; location and financing; cost of construction and operation.

Senior elective; 2nd semester; 3 credits.

6. Transmission and Distribution of Electric Energy.—A discussion of typical systems of power generation, transmission, and distribution for lighting, traction, and industrial purposes, and their design, construction, operation, and maintenance with some reference to costs and rates.

Senior elective; 2nd semester; 3 credits.

7. Design of Electrical Machinery.—The applications of fundamental principles and of considerations of commercial practice to the design of various classes of direct and alternating current machinery.

Senior elective; 2nd semester; 3 credits.

8. Illumination and Photometry.—The theory of illumination and a discussion of illuminating apparatus and devices; the design, construction, and operation of electric lighting systems and the photometry of lamps.

Senior elective; 2nd semester; 3 credits.

CHEMISTRY AND CHEMICAL ENGINEERING.

1. General Chemistry.—Entrance Chemistry, if offered, will not be accepted as the equivalent of this course.

Two lecture-demonstrations, one recitation, and one laboratory period, covering the fundamental principles of the science, the chemistry of the non-metals, and metals and the elements of qualitative chemical analysis.

Freshmen; throughout the year; 3 credits.

2. Qualitative Analysis.—The laboratory work will be varied to some extent according to the course pursued and will include analyses of alloys, rocks, minerals, slags, mattes, and other compounds or mixtures. One lecture or recitation and three laboratory periods per week.

Sophomore; 2nd semester; 3 credits.

3. Quantitative Analysis.—An introductory course consisting of one lecture and three laboratory periods per week devoted to volumetric and gravimetric determinations, including practice in the calibration of flasks and burettes, acidimetry and alkalimetry, chlorimetry, and the analysis of simple compounds and ores.

Sophomore; 2nd semester; 3 credits.

4. Quantitative Analysis.—A continuation of course 3, and of a more advanced nature. Instruction will be given gravimetric, volumetric, and electrolytic methods of analysis. The work will include the analyses of iron and steel, slags, silivates, paints, lubricants, ores, etc. One lecture, laboratory conferences and the equivalent of five laboratory periods weekly.

Junior; 1st semester; 5 credits.

5. Gas and Oil Analysis.—A laboratory course with weekly conferences, devoted to practice in the calorimetry and typical methods of analysis of gases and oils.

Junior; 2nd semester; 3 credits.

6. Water Analysis.—Lectures and laboratory practice in the examination of water with reference to its use for domestic and industrial purposes.

Elective; 1st semester; 3 credits.

7. Organic Chemistry.—Two lectures and one recitation on the general principles and theories of organic chemistry and the methods of preparation and characteristic reactions of organic compounds with a corresponding laboratory course of three periods per week. A limited amount of work along special lines or organic chemistry may be elected.

Junior; throughout the year; 5 credits.

8. Advanced Organic Chemistry.—A conference and laboratory course dealing with the preparation and reactions of special classes of organic compounds and including ultimate organic analysis. The work may be varied, in a limited degree, according to the option of the student.

Senior elective; throughout the year; 3 to 4 credits per semester.

9. Industrial Chemistry.—The course is given by means of lectures, recitations, laboratory practice, and visits of inspection, and deals with the chemical processes, apparatus, and operations involved in various chemical

industries, and with the analysis of raw materials and products. Attention is given, as far as may be, to estimates of apparatus and plants for particular purposes and to costs and management.

Senior; throughout the year; 5 credits per semester.

10. Physical Chemistry.—The course is arranged to embrace a systematic presentation, with experimental illustration, of the more important principles of theoretical chemistry, stress being laid on such points as the theory of solution, reaction velocity, catalysis, chemical equilibrium, and the applications of the principles of physical chemistry to industrial practice. The course is accompanied by laboratory work in the determination of molecular weights and physico-chemical measurements.

Senior; throughout the year; 2 credits per semester.

11. Electro-Chemistry.—Lectures, recitations, and laboratory work partly in continuation of course 11, dealing with the principles of the subject and their application to chemical industries. The laboratory practice includes electro-chemical measurements and the electrolysis of chemical compounds.

Senior; throughout the year; 2 credits per semester.

12. Microchemistry.—Lectures and laboratory work on the use of the microscope and its accessories, and the application of microscopic apparatus and methods to chemical investigation and analysis.

Senior elective; 2nd semester; 3 credits.

13. Assaying.—Lectures and laboratory work in the crushing, sampling, and assaying of gold, silver, copper, lead, and zinc ores, and the sampling and assaying of bullion.

Elective; 1st semester; 3 credits.

14. Metallurgy of Iron and Steel.—A discussion of the properties and principles of production and manufacture of iron and steel, with laboratory practice in special analytical methods applicable to iron and steel determinations. The work is supplemented by visits of inspection and reports.

Senior; 1st semester; 2 or 3 credits.

15. General Metallurgy.—A course treating of metallurgical processes and the principles of combustion and thermochemistry, pyrometry, fuels, fluxes, refractories, furnaces and artificial draft and blast.

Senior elective; 1st semester; 2 credits.

16. Metallurgical Problems.—The solution of a number of selected problems relating to the principles utilized in practical metallurgy.

Senior elective; 1st semester; 1 to 2 credits.

17. Metallurgy of Non-ferrous Metals.—A course of lectures dealing in considerable detail with the metallurgy of copper, lead, silver, gold, zinc, and aluminum, and more briefly with nickel, cobalt, arsenic, antimony, tin, mercury, bismuth, etc. The physical and chemical properties of ores and the various processes employed and principles involved in reduction and refinement are discussed.

Senior elective; 2nd semester; 3 credits.

18. Metallurgical Laboratory.—The laboratory practice is closely related to the class room exercises. It includes special analytical methods applicable to iron and steel, fuel, fluxes, and slags. Practice in pyrometry and the measurement of blast velocity, and the analysis of flue gas by special apparatus. Roasting, smelting, leaching and amalgamating processes as applied to the reduction of the ores of gold, silver, copper and lead.

Senior; 2nd semester; 3 to 5 credits.

19. Chemical Engineering.—A study of the types of apparatus and operations involved in chemical manufacture, the design of chemical plants, and the consideration of the chemical resistance of materials suitable for their construction.

Senior elective; 2nd semester; 3 to 5 credits.

Examinations

Examinations are held semi-annually at the end of each semester. The work done during the semester, as well as the examinations, is considered in the grading of students. The results of the examinations are expressed on the basis of 100.

70 is required for passing; 60-70 indicates a condition; below 60 shows failure. Regularity of attendance at lectures and laboratory, and faithfulness in the performance of daily work are of as much weight in determining the standing of students in their classes as are the examinations.

Conditions.—Conditioned students must remove such conditions at the examinations given for that purpose during the following semester. Failing in this the student is obliged to discontinue the subject in which he is conditioned and to repeat it during the next semester.

For a special examination of this kind a fee of $1.00 is charged.

DEGREES.

The degree of Bachelor of Science in Civil Engineering, Mechanical Engineering, Electrical Engineering, and Chemical Engineering will be conferred on students who satisfactorily complete the corresponding courses.

Register of Students, 1913-1914

Nemesio Alvare ..... Freshman
James F. Ashenden ..... Freshman
Thomas I. Barron ..... Freshman
William A. Barron ..... Freshman
J. Raymond Casy ..... Freshman
Fred Eifler ..... Sophomore
Francis Fernando Grau ..... Sophomore
Alfonso Gallardo ..... Freshman
Bernard Emmett Hartnett ..... Freshman
Frederic M. Herr ..... Freshman
Francis Joseph Keenan ..... Freshman
John Joseph Kinsella ..... Freshman
James E. McWilliams ..... Freshman
Braulio Antonio Municas ..... Sophomore
James G. Noel ..... Freshman
Fidel Cadianos Ochoa ..... Freshman
Enrique Hernandez Orpi ..... Freshman
Crescent O'Connor ..... Freshman
Gabriel Pawlowski ..... Freshman
John V. Ryan ..... Freshman
Antonio Rodreguez Sanchez ..... Freshman
Walter L. Slatter ..... Freshman
Frank Joseph Stephens ..... Sophomore
Lawrence David Wall ..... Freshman

Loyola University

Central States College of Pharmacy

1914

Department of Pharmacy
Chicago

Application for Matriculation

CENTRAL STATES COLLEGE OF PHARMACY

Department of Pharmacy
Loyola University

The student intending to take the course should fill in this form, and mail it to the Registrar together with the matriculation fee of five dollars. Students are permitted to select their seats in order of enrollment.

Name in full.....

Address .....

Month, day and year of birth.....*age, yrs*.....*months*....

What Class do you desire to enter?.....

Are you a Grammar School Graduate?.....

Are you a High School Graduate? .....

Do you desire work while attending?.....

.....

Forward to G. L. SECORD, M. S. Ph. G., Registrar
Loyola Avenue and Sheridan Road
Chicago, Illinois

College Calendar

1914

Junior Lectures begin.....Tuesday, September 29
Junior Laboratories open.....Saturday, October 3
Senior Lectures begin.....Wednesday, September 30
Senior Laboratories open.....Monday, October 5
Ebert Memorial Day.....Friday, November 20
Thanksgiving Day, holiday.....Thursday, November 26
Junior Lectures close for holidays.....Saturday, December 19
Senior Lectures close for holidays.....Friday, December 18

1915

Junior work resumed.....Tuesday, January 5
Senior work resumed.....Monday, January 4
Washington's Birthday.....February 22
Lincoln's Birthday, holiday.....Friday, February 12
Junior Laboratories close.....Saturday, May 8
Senior Laboratories close.....Friday, May 7
Junior Lectures close.....Saturday, May 8
Senior Lectures close.....Friday, May 7
Examinations begin.....Monday, May 10
Examinations end.....Saturday, May 22
Commencement .....Tuesday, June 22

Officers of the College

G. L. Secord.....President
W. F. von Zelinski.....Secretary
R. H. Phillips.....Treasurer

BOARD OF TRUSTEES

Roland H. Phillips,
John L. Mathery, S.J.,
W. F. von Zelinski,
John D. Leek,
Henry S. Spalding, S.J.,
Peter S. Bartzen,
G. L. Secord.

OFFICERS OF THE BOARD

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Peter S. Bartzen.....Vice-President
G. L. Secord.....Secretary-Treasurer

BOARD OF CENSORS

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Robert Robinson,
William Silverberg,
R. R. Rains,
Albert F. Burhop,
M. A. Bilz,
Andrew I. Smith,
L. L. Huston.

The Faculty

JOHN L. MATHERY, S.J.....1076 West 12th Street
President of the University.

HENRY S. SPALDING, S.J.....Loyola Avenue and Sheridan Road
Regent-Director of Faculties.

ROLAND HODGE PHILLIPS, Sc.B., Ph.G., M.D...118 South Winchester Avenue
Dean of the Faculty—Professor of Organic Chemistry

GEORGE LOUIS SECORD, M.S., Ph.G.....6334 Wayne Avenue
Registrar—Professor of Theory and Practice of Pharmacy.

WALTER FRANZ VON ZELINSKI, Sc.B., M.D., Ph.G.4709 North Rockwell Street
Secretary of the Faculty—Professor of Materia Medica and Botany.

LOUIS J. PUHL, S.J.....Loyola Avenue and Sheridan Road
Professor of Inorganic and Analytical Chemistry.

ARTHUR WAY WHEELER, Ph.G.....3759 Lake Avenue
Instructor in Botany and Plant Histology.

THOMAS A. CARTER, Sc.B., M.D.....919 Wellington Avenue
Professor of Physiology and Anatomy.

ROBERT L. BORCHERT, M.D.....
Instructor in Materia Medica.

THOMAS A. KELLY, S.J.....Loyola Avenue and Sheridan Road
Professor of Physics.

HUGH A. CAPERTON, LL.B.....106 North La Salle Street
Lecturer on Pharmaceutical Jurisprudence.

A. A. NEFF, Sc.B.....Loyola Avenue and Sheridan Road
Instructor in Mathematics and Book-keeping.

Laboratory Assistants: To be selected.

HISTORICAL

The Central States College of Pharmacy, Department of Pharmacy of Loyola University, now in its sixth year, was organized and duly chartered under the laws of the State of Illinois to give instruction in Pharmacy and its allied branches.

The work began in a specially equipped building at 412 Fulton Street, on the West Side, where, after two years of diligent and successful study, the first class of six students was graduated.

From the very beginning the courses of study were planned and given on the broadest possible basis, and the high standards which were taken and accepted at the onset have since proved invaluable in establishing a name and reputation for the college.

Each year it has been found necessary to enlarge the teaching facilities and faculty, and as a further indication of the progressiveness of the institution, arrangements for an affiliation with Loyola University were completed in the spring of Nineteen Ten, the college becoming its department of Pharmacy.

This arrangement enabled the college to permit of more intensive teaching, and since which time the enrollment has steadily increased. The necessity for larger and better quarters now became imperative, so that at the expiration of the term of 1911-12, the college and student body removed in toto to the new and modern structure known as the Michael Cudahy Science Hall of Loyola University.

This building is not only ideally located on the beautiful North Shore overlooking Lake Michigan, but is equipped with all modern appliances and furnishings for lecture, quiz and laboratory instruction. Elsewhere will be found descriptions of equipment, outline of courses, etc.

ANNOUNCEMENT

The regular annual course of instruction in the Central States College of Pharmacy, Department of Pharmacy, Loyola University, will begin Tuesday morning, September 29th, at ten o'clock, and will continue until May 22d Nineteen Hundred Fifteen, covering a period of more than 600 lectures and 700 laboratory hours, exclusive of holidays.

The completion of two full terms is required for graduation,

and the degree in Pharmacy is conferred upon those who have satisfactorily completed the work. The course is systematic, scientific and practicable, affording a training which enables the graduate to safely assume the duties of the modern Pharmacist.

REGISTRATION

To facilitate Registration, students are requested to report to the Registrar during the week preceding the opening of the school term, or before this time if convenient, for the purpose of arranging for entrance. The days assigned for Registration are Monday, Wednesday, and Saturday. Special arrangements may be made by letter or telephone.

REQUIREMENTS FOR ADMISSION

Applicants for admission to the course leading to the degree of Graduate in Pharmacy must be of good moral character, not less than seventeen years of age, and must show record of a preliminary training of at least one year high school or its equivalent after the completion of the Grammar Grades. Applicants for the course who feel qualified to enter, but are lacking in the necessary credentials, are requested to take the ENTRANCE EXAMINATION, conducted by the officers of the University.

SPECIAL STUDENTS: Applicants who fail to pass the entrance examination are permitted to pursue the course of instruction with the regular class. Upon the successful completion of the work, the student will receive a certificate showing that he has completed the regular course of instruction at this institution.

ADVANCED STANDING

Students who have completed the first year in other recognized institutions will be permitted to enter the Senior Class by first placing on file with the Registrar a complete and satisfactory record of the work done, which must equal the work of this institution.

For further particulars, address the Registrar.

THE COLLEGE BUILDING

Is a four-story new and modern steel structure, fire-proof, sanitary, and perfectly lighted and heated. The building is located at Loyola Avenue and Sheridan Road, on the North Side of the

city; is easily accessible by way of elevated and surface lines, and but a short ride from the down-town district.

The lecture halls and laboratories are of the most recent design and are equipped with all the necessary seats, blackboards, demonstration tables, laboratory tables, apparatus and accessories for the proper performance of the work.

THE PHARMACY LECTURE HALL

Is located on the north side of the building; is perfectly ventilated and heated and receives light from two full sides of the room. The artificial light is that of electricity and the proper illumination is obtained by refraction.

The room is 50 x 40 feet and will comfortably seat from 90 to 100 students.

The seats are in tiers, and each tier is elevated slightly above the one in front, thus giving the student a clear view to everything that is being done. A large demonstration table, with water connections, is at the disposal of the instructor to elucidate the work by practical demonstrations, thus impressing the didactic work more firmly on the minds of the students.

THE CHEMISTRY HALL

Is the same as the Pharmacy Lecture Hall except that Fume Chambers, Chemicals and Chemical Reagents are at the handy disposal of the Instructor. Charts of the Elements, Periodic Law, etc., are before the student constantly, thus giving an opportunity to study these at will.

THE MATERIA MEDICA LECTURE HALL

Is on the south side of the building. It is perfectly lighted, ventilated and heated, and also receives natural light from two full sides of the room. Artificial light is by refraction.

This room is 50 x 40 feet and will accommodate about 100 students. The seats are elevated in the same way as those in the Pharmacy Lecture Hall, the rise being about 30 inches in 40 feet.

The Materia Medica Lecture Room directly adjoins the Histology Laboratory, where specimens of crude drugs can be had for the work in this subject.

THE PHARMACY LABORATORY

Is located on the second floor on the north side of the building. The Laboratory is provided with gas, water and all accessories and will accommodate 64 students.

This room is 65 x 29 feet and each student is provided with from 7 to 8 square feet of working space.

THE CHEMISTRY LABORATORY

Adjoins the Chemistry Lecture Room and is located on the main floor, on the north side of the building. The laboratory is provided with fume chambers and all accessories. It is 75 x 29 feet and will accommodate 80 students; each student having 7 to 8 square feet of working space. A scale room directly adjoins this laboratory, where all weighing for analysis is done.

THE HISTOLOGY LABORATORY

Adjoins the Materia Medica Lecture Hall on the south side of the building and is provided with eight tables accommodating six students each. Additional space is available, when necessary, around the sides of the room where provision is made for fifteen students. The light is natural, coming in abundance from two full sides of the room. Each student is supplied with an outfit for the work in Histology which he keeps in a drawer provided for that purpose.

The Histology Laboratory is also used for the work of Pharmacognosy and Physics.

COURSE OF INSTRUCTION

The course of instruction is divided into a Junior and Senior year, comprising thirty-two weeks each. Junior and Senior students attend three days each week, alternately. This arrangement enables the student to gain that practical experience in pharmacy required for license by the various State Boards of Pharmacy, as well as to provide a source of income; the average remuneration for such services ranging from six to twelve dollars weekly, thus permitting many to earn their own way who could not otherwise attend.

Lectures, Quiz and Laboratory instruction are employed in all departments for the giving of the work. Students are required to

take all monthly examinations, be in regular attendance and adhere closely to the rules of the college. Candidates will be excused from the final examination in each subject in which a general average of eighty per cent or above for the year has been attained.

THE LIBRARY

The Library contains the newest reference works on the subjects taught in the college, as well as the current issues of the various Pharmaceutical Journals which are published weekly or monthly and afford an excellent opportunity for the student to keep abreast of the times in the way of commercial reports, newer remedies, discoveries, and the meetings and workings of the various Pharmaceutical Associations.

The Library facilities were greatly increased in 1912 by the addition of the entire Library of the late Emil A. Hiss, Ph.G., including more than one hundred volumes of works in Pharmacy, Chemistry, Materia Medica, etc., besides other works valuable to the student of Pharmacy.

Students have access to the Library at all times and may be assisted in their study by those in charge. Students are requested to consult these references frequently, and to seek information not obtainable here in the great Libraries of the city, where anything desired will be supplied without cost.

Outline of the Course

JUNIOR YEAR

Subjects—	Hours per Week 1st Sem.	Hours per Week 2d Sem.	No. of Weeks 1st Sem.	No. of Weeks 2d Sem.	Total No. Wks.	Total No. Hrs.
Chemistry Theoretical	3	3	16	16	32	96
Botany-Biology-Bacteriology	2	2	16	16	32	64
Experimental Chemistry	4	0	5	0	5	20
Pharmaceutical Laboratory	2	3	16	16	32	80
Microscopy	2	2	16	16	32	64
Physiology	1	1	16	16	32	32
Pharmaceutical Arithmetic	1½	0	16	0	16	24
Qualitative Analysis	4	4	11	16	27	108
Dispensing	0	2	0	16	16	32
Pharmaceutical Latin	0	3	0	2	2	6
Physics Laboratory	2	0	8	0	8	16
Physics Lecture	1	0	16	0	16	16
Pharmacognosy	0	1	0	16	16	16
Materia Medica-Toxicology	0	3	0	5	5	15
Pharmacy Theoretical	2	3	16	14	30	74
Mathematics	1	0	16	0	16	16

Total number of lecture hours, 343; Laboratory hours, 336.

SENIOR YEAR

Subjects—	Hours per Week 1st Sem.	Hours per Week 2d Sem.	No. of Weeks 1st Sem.	No. of Weeks 2d Sem.	Total No. Wks.	Total No. Hrs.
Pharmacy Theoretical	3	3	16	14	30	90
Chemistry Organic	3	3	16	16	32	96
Materia Medica	3	3	16	6	22	66
Quantitative Analysis	5	0	16	0	16	80
Pharmaceutical Laboratory	3	3	16	16	32	96
Dispensing	2	2	16	16	32	64
Pharmacognosy	1	1	16	16	32	32
Histology Laboratory	2	2	16	16	32	64
Pharmaceutical Testing	0	5	0	8	8	40
Posology-Toxicology	0	3	0	10	10	30
Drug Assaying	0	5	0	6	6	30
Pharmaceutical Jurisprudence	0	1	0	6	6	6
Commercial Pharmacy	0	3	0	2	2	6
Qualitative Analysis	0	5	0	2	2	10

Total number of lecture hours, 294; Laboratory hours, 416.

SUBJECTS AND METHODS
PHARMACY

G. L. Secord, M.S., Ph.G., Professor of Pharmacy

JUNIOR YEAR

The didactic work in Pharmacy during the Junior year will extend throughout the term and includes two lectures and one quiz hour each week. This time includes the allotted hours for Pharmaceutical Latin, which is given at the close of the second Semester.

The time during the first Semester is equally divided between the Theory of Pharmacy and Pharmaceutical Arithmetic, except for the book-keeping and ordinary mathematics, which is conducted separately, and includes one hour per week each. The time during the second Semester is devoted exclusively to Pharmaceutical Technique and Inorganic Pharmacy.

The work in the Operative Laboratory begins with the opening of the term and continues throughout the year, while the Practice in Dispensing will occupy two hours each week during the second Semester.

For convenience of study the subject will be considered under the following divisions:

Elementary Pharmacy: Under this division will be considered in the beginning lectures, the history, development and classification of Pharmacy, together with a comprehensive study of the various Pharmacopoeias, including their methods of preparation, degrees of authority, importance, use, etc. Specific Gravity and Volume with Metrology will receive due consideration.

Pharmaceutic Arithmetic: The object of the work in this branch is to teach the student to use easily and accurately the various systems of weights and measures. The work in mathematics, which is given separately, includes a review of common and decimal fractions, proportions, etc., and prepares the student for the calculations of strength and proportions of the various Pharmaceutical Preparations, percentage strength, alligation, dilutions, solutions, Specific Gravity calculations, and the arithmetic of Commercial Pharmacy.

Chemical and Physical problems are fully considered with relation to the laws of simple and multiple, combining proportions by weight, molecular weight, Atomic composition, and the determination of Molecular Formulae.

Book-keeping: Single and double entry is considered by having each student perform his own work in individual ledgers, day books, etc. At the same time the student is instructed along the lines of banking and the various commercial forms. In conclusion, a typical page of both poison and liquor registers is made and instructions relative to necessity and making of proper records in these books given.

Pharmaceutical Technique: This subject comprises a study of the various operations employed in the practice of Pharmacy and includes, besides the regular lectures, practical demonstrations of the proper selection and use of the various apparatus and materials, as well as the carrying out of the official procedure in each case.

Inorganic Pharmacy: In this division the metallic and non-metallic elements are duly considered with especial reference to their official compounds, and preparations. The official nomenclature, properties, manufacture, derivation, production and commercial supply are given for each substance, and when advisable their respective preparations and uses.

Pharmaceutical Latin: In order that the student acquire a fundamental knowledge of prescription writing, it is deemed advisable to make a short study of the Latin language. This study includes declensions, conjugations, numerals, ordinals, construction, translations, etc. The student will also receive minor prescription reading and instruction along the lines of incompatibilities.

DISPENSING

The exercises in this branch during the Junior year will be for the purpose of impressing the more simple work in prescriptions, with especial reference to dosage saturations, percentage solutions, dilutions, labeling, and the more common incompatibilities. The student will receive also an abundance of experience in the correction of common errors in prescription work.

SENIOR YEAR

PHARMACY

The Senior year begins by taking into consideration the manufacture of Extractive preparations, commencing with the simplest forms, such as infusions, decoctions, and gradually advancing to the more elaborate preparations, as the Tinctures, Fluid Extracts, Resins, and Oleo-Resins.

The various classes of preparations are presented in progressive order, and are exemplified by grouping according to their drug strength.

The preparations of the solids, such as troches, pills, confections, cachets, tablets, capsules, ointments, cerates, suppositories and plasters, are next considered with respect to their consistence and therapeutic uses.

GALENICAL PREPARATIONS

These preparations of the U. S. P. and N. F. are prepared according to classification and strength, the manufacturing of which follows closely upon the didactic work.

The student is successively drilled in dosage, synonyms, and common names, both in the Laboratory and Quizzes.

ORGANIC PHARMACY

This branch includes the study of: Cellulose, Hydrocarbons, Carbohydrates, fixed and volatile oils, alcohols, Coal and Wood Tar products, and the compounds and modifications of each.

The Glucosides and Alkaloids are taken up with reference to their derivation and production. Serum Therapy is fully considered as regards the production, preparation and standardization.

Ferments and Animal products are next considered with reference to the derivation, preparation and uses.

PHARMACEUTICAL LABORATORY

Here, as in the Junior year, it is advisable that the Laboratory exercises follow closely upon the lectures.

The student is drilled in the manufacture of the various preparations of the U. S. P. and N. F., including: Tinctures, Fluid

Extracts, Extracts, Soaps, Ointments, Poultices, Cerates and Suppositories.

DISPENSING

Besides the regular work of compounding the extemporaneous preparations from the U. S. P. and National Formulary, the student will here receive especial attention in the compounding and reading of original physician's prescriptions, including also the consideration of the various kinds of incompatibilities.

The administration of the various mixtures in various forms and modifications is next considered, and following this the preparation of Pills, Cachets and Tablets.

For completion of the subjects the student is drilled in prescription writing, abbreviations and various methods of wrapping packages.

TEXT BOOK

Text Book—Arny's Principles of Pharmacy.

Reference Works—Caspari's Pharmacy, United States Pharmacopoeia, and National Formulary, Scoville's Art of Compounding, Remmington's Practice of Pharmacy.

CHEMISTRY

R. H. PHILLIPS, Sc.B., M.D., Ph.G., Professor of Organic Chemistry.
LOUIS J. PUHL, S.J., Professor of Analytical and Inorganic Chemistry.

JUNIOR YEAR

The study of Chemistry in the Junior year begins with a thorough consideration of those underlying principles which are so necessary for the proper comprehension of the work to follow, and includes such as: Matter, mass, valency, the elements and their nomenclature, chemical formulæ, equations, the atomic theory, the molecular theory, the corpuscular theory, the laws and their application.

The elements arethen taken up with reference to their classification, derivation, production, properties, uses, and the manufacture of their respective compounds.

Instruction is given by lectures, laboratory exercises and quizzes. The lectures are replete with numerous experiments and demonstrations, thus presenting the various topics of the subject in a practical as well as a theoretical manner.

LABORATORY

The exercises in the laboratory follow closely upon the didactic work and include during the first Semester: Physical changes, chemical changes, a study of the more important gases, acids, bases and salts, and a thorough consideration of the acid radicals with reference to their properties and detection. Considerable attention is given to methods of oxidation and reduction and at the same time a practical demonstration of the valency of elements. During the second Semester the work in qualitative analysis is taken up, when the student will be required to analyze twenty-five unknown solutions and substances.

CHEMISTRY

SENIOR YEAR

The study of Inorganic Chemistry is here resumed and later, after a thorough introduction of the principles involved, the study of Organic Chemistry is taken up. The various classes of hydrocarbons are fully considered and the student is successively drilled in the methods of oxidation and reduction in the preparation of: Alcohols, aldehydes, acids, ketones, ethers. Petroleum is considered with reference to its composition and the methods in the preparation of the official derivatives. These are then studied according to their chemical composition, specific gravities, boiling points, flashing points, color, consistency, etc.

Benzine, aniline, and other substances are duly considered with reference to their derivation and the properties and production of the most important compounds.

QUANTITATIVE ANALYSIS

VOLUMETRIC—GRAVIMETRIC

The beginning work deals with the methods of standardizing the various kinds of apparatus, such as: Pipettes, burettes, and the theoretical estimation of the purity of salts, thus bringing to the mind and attention of the student the proper methods of calculating the percentage purity of a compound.

The estimation of simple substances, such as: Acids, bases, are next taken up, gradually advancing to the analysis of the more complex salts. The percentage of purity of such substances as: Phenol, citral, formaldehyde, etc., are also considered, and following, this, pharmaceutical assaying, urine analysis and sanitary analysis.

Pharmaceutical Testing: Will include the various tests applied to the pharmacopoeial substances for determining the presence of various impurities.

Text Books—Junior: Sadtler & Coblentz, Inorganic Chemistry, Secord's Qualitative Analysis, Smith's Inorganic Chemistry, Muter's Qualitative Analysis.

Senior: Noye's Org. Chemistry, Schimph's Essentials of Volumetric Analysis, Coblentz & Vorisek's Vol. Analysis, U. S. P.

MATERIA MEDICA

W. F. von Zelinski, M.D., Ph.G., Professor of Materia Medica.
Arthur W. Wheeler, Ph.G., Instructor in Histology.

This course is taken up during the latter part of the Junior year and continues throughout the entire curriculum. It comprises a thorough consideration of the source of the various substances used for medicinal purposes, as well as the study of the characteristics of the plant, mineral or animal, yielding the drug.

The study of the action and uses of drugs will be outlined as far as possible on a therapeutic basis, that is, groups of drugs acting in like manner will be considered as a class. Under this subject will be considered Posology, Pharmacodynamics, Therapy Dynamics, and Toxicology.

Special lectures will also be given on Organic and Serumtherapy and so-called Medicinal foods and Enzymes. Especial attention will be given Official Drugs and National Formulary Preparations.

A brief consideration will be given those drugs which are not of official or of N. F. origin, but which are of proven value and well recognized.

PHARMACOGNOSY

This course, extending throughout the Junior and Senior terms, is practical, comprehensive, and owing to the importance of this

subject no effort is spared to thoroughly instruct each student in this branch. The work will consist of lectures, quizzes and laboratory exercises. In the study of the crude drug, the student will be required to make drawings and to write a description of the various vegetable drugs, their habitat, technical and common name, and constituents.

Specimens will be furnished to facilitate study and every effort will be made to teach the student how to examine a drug in a systematic and intelligible manner. Examinations will be held from time to time as may be deemed necessary to note the student's progress.

BIOLOGY—BOTANY

The scientific Pharmacist has reached a stage when it is no longer possible for him to claim to have a thorough training while he remains ignorant of the great laws of Biology. Without being either a botanist or zoologist it is incumbent on the Pharmacist to learn much of how the world of living things has become what he sees it to be. This is not only possible, but essential. There is no other way in which he can realize the rapid advances being made in the medical sciences along Biological lines and in which work he should, and must eventually, share.

The object of this course, therefore, is to endeavor to gain a broad view of the phenomenon of life, in its various aspects, to see how it became more complex according to changing surroundings and to explain prevailing theories in regard to heredity, immunity and theories of origin and beginnings of life. A number of organisms will be taken up in detail to elucidate the subject.

The course in Botany, while a general one, is taught from the standpoint of its relation to the needs of the modern Pharmacist, and extends throughout the Junior term.

The course consists of systematic lectures, recitations and demonstrations by means of drawings and specimens supplemented by modern projection apparatus. The instruction is so graded as to give a thorough knowledge of the fundamental principles of the science, especially as it pertains to the study of pharmacognosy and as a guide to the determintion of plants.

Consideration is given to the physiology and anatomy of plants as well as classification, and the relation plants bear to each other.

Laboratory Course: To further enable the student to grasp those points essential to a proper understanding of the subject and for the practical instruction in the identification of plants and plant parts, actual specimens or models will be provided which the student will dissect, making drawings and noting important points, thus familiarizing himself with the distinguishing characteristics of the different species and plant organs.

Demonstrations and recitations are also conducted by the instructor and the work is graded at the end of each Semester.

BACTERIOLOGY

This subject is considered under Botany, owing to the classification of Bacteria under plants. As these organisms are daily concerned in the advantages and disadvantages of our well being, and as Bacteriology is one of the foremost sciences in the industrial and medical worlds, it becomes necessary for the Pharmacist to have a certain amount of knowledge along these lines. Accordingly, the lectures on this subject, while not extensive, are sufficient for a good foundation for more advanced work should the student desire it. Demonstrations of culture mediums, staining and cultural characteristics are made. Two or three special lectures are given during this course by outside workers in this field. During the term of 1912-13, J. F. Biehm, A. M., M. D., former city Bacteriologist, delivered a course of lectures on the cultural characteristics and virulency of pathogenic organisms.

PLANT HISTOLOGY

The importance of a knowledge of the minute structure of plants as a foundation for the thorough study of plant physiology and anatomy cannot be overestimated, and it is quite necessary for the student to acquire a mastery of this fundamental study. For this reason the work in this department will be mainly pursued in the laboratory, and lectures, recitations and demonstrations will supplement the work as may be required.

The Laboratory of Histology is especially equipped with new and modern microscopes and needful accessories for proper instruction. Each student will be instructed in the methods of preparing plant tissues for examination, and will prepare, mount and stain a number of carefully selected sections. The students will also be

required to make drawings of the various structures under the supervision of the instructor.

The course extends throughout the Junior term and is preliminary to the advanced work of the Senior year, where the knowledge gained of the subject is applied to the identification of powdered drugs and in the detection of adulterations. During the second Semester of the Senior term the student will be examined as to his ability in the identification of various powdered drugs and the detection of admixtures.

PHYSIOLOGY AND ANATOMY

THOMAS A. CARTER, Ph.B., M.D., Professor of Physiology.

This embraces a series of lectures, systematically arranged, followed by quizzes, written and oral.

The work in Physiology is intended to give the student a comprehensive idea of the subject without going into the minute deails.

The general plans of the lectures is as follows:

The plan of the human body
The circulatory system
The respiratory system
The senses and their functions
The digestive system
The nervous system
The locomotor system
A few special lectures will be given on Hygiene

Anatomy: Only the salient features of the subject are emphasized; the aim being to review the most important facts as applied to the needs of the pharmacist.

The anatomy of the various organs is considered, together with their physiology and histology.

The bones, joints and muscles are considered in such a manner as to render intelligible the meanings of the descriptive terms of the science. Charts, skeletons and dissected material will be used as required to elucidate the lectures.

PHARMACEUTICAL JURISPRUDENCE

A series of lectures will be given in this subject, comprising the usual subjects of commercial law, such as: Contracts, agency, partnership, insurance, etc.

Special lectures will also be given on the statutory regulations of the practice of Pharmacy and the Food and Drugs Act of the State and National Government.

FEES AND EXPENSES

Tuition Fees: The tuition fee for each year is seventy-five dollars, which entitled the student to one continuous course of lectures and laboratory instruction in all branches. This covers the entire cost of chemicals and drugs consumed in the laboratories; no extra fee is charged for materials.

Laboratory Deposit: The requisite apparatus necessary for completion of the work in the laboratories is furnished by the College, and to cover breakage to such apparatus, as well as willful damage to building and fixtures, a deposit of ten dollars is required at the beginning of the term.

From this will be deducted at the end of the year the cost of apparatus broken, missing, or not returnable.

Charge will also be made against deposit for apparatus which is used by the class in common. The remainder of the deposit will be refunded at the close of the term.

Locker fee, one dollar.

ATHLETICS

The students of this Department are eligible for places on the regular University Baseball, Football teams, etc., and all desiring to try out for places are requested to be on hand early.

Students have access to all games on the campus as well as the various athletic apparatus, and to maintain the equipment as well as to supply new materials from time to time, a nominal fee is charged each student. The fee for the students of this Department is two dollars.

PRIZES

Alumni Prize: Gold Medal. Given to the student attaining the highest general average throughout the Senior year. Junior grades will also be taken into consideration, if desired, for those who have attended their Junior year at this institution.

Pharmacy Prize: Membership in the American Pharmaceutical Association.

Materia Medica Prize: Membership in the American Pharmaceutical Association.

ATTENDANCE

The regular attendance of students at recitations, lectures and laboratory periods is required. The absence of any student during the year from more than five recitations or lectures or three laboratory periods in any subject will be deemed equivalent to a condition in the subject in which the periods were missed, and the student will be required to take a final examination in such subjects before being passed.

Any student missing more than five per cent of the work in any subject will be required to make up the loss before being given credit in the work.

EXAMINATIONS

Monthly examinations will be held in the subjects of Pharmacy, Chemistry and Botany, while those for Physiology, Histology, Mathematics, Book-keeping and Pharmaceutical Latin will be held at the end of the Semester.

Examinations in Pharmacy Laboratory and Dispensing will be given at the close of the term, while those in Pharmacognosy will number three throughout the year.

In the Senior year Materia Medica and Toxicology examinations will be held monthly, while during the Junior year there will be but one at the close of the term.

No charge is made for the regular monthly examinations and no private examinations are given. Students missing a monthly examination will be required to take a final examination in this subject.

Students required to take final examination in any subject will file application for same three days before the taking of such examination, together with the examination fee of two dollars.

GRADUATION

To receive the degree of Graduate in Pharmacy, the candidate must have completed in a successful manner the course of study prescribed by this institution and have attended not less than 90 per cent of the lecture, quiz and laboratory instructions. He must be not less than twenty-one years of age, of good moral character, and have had the required amount of practical experi-

ence and a preliminary education of at least one year high school after completion of the grammar grades.

Those who successfully complete the course of study, but lack the required practical experience or age, may receive the degree of Bachelor of Pharmacy and the degree of Graduate in Pharmacy conferred when the above requirements have been attained.

A diploma fee of ten dollars will be required.

ENROLLMENT

Places in the lecture halls and laboratories will be assigned to students in order of enrollment. To enroll a Junior student will fill out matriculation blank and forward it to the Registrar with $5.00 for matriculation fee. Matriculation fee to be paid but once. Students are required to report to the Registrar on the first day of school to make arrangements for the payment of tuition, etc.

EMPLOYMENT

The various Pharmacies throughout the city offer unusual facilities for employment. Those desiring work while in attendance should consult the Registrar as soon as possible after matriculating. The compensation for such services will average eight or nine dollars per week; however, as high as twelve and fifteen dollars per week is paid to those having had previous experience in drug stores.

INSTRUCTION TO STUDENTS

All students should report to the Registrar immediately upon arrival in the city, and he will instruct them as to suitable places for securing board and room. The books requisite for the course will be recommended by each individual instructor during the first week of school. For further information, address G. L. Secord, M.S., Ph.G., Registrar, Loyola Avenue and Sheridan Road, Chicago, Illinois.

ALUMNI OFFICERS

A. W. Wheeler, Ph.G.....President
W. A. Liesch, Ph.G.....Vice-President
E. K. Rains, Ph.G.....Secretary-Treasurer

Loyola University

1076 West Twelfth Street
Chicago, Ill.

1452 STUDENTS **127 PROFESSORS**

LAW DEPARTMENT—Has quarters in the Ashland Block. The Dean is William Dillon, LL. D. Candidates for this course apply to A. D. McMahon, A. M., LL. B., Secretary, Ashland Block. Hours of Instruction 6:30 to 9:00 evenings.

MEDICAL DEPARTMENT—Bennett Medical College, 1358-1362 Fulton Street. Founded 1868. Every facility in the way of complete equipment and competent faculty. J. D. Robertson, M. D., President; Maximillian Herzog, M. D., Dean.

ENGINEERING DEPARTMENT—Opened September, 1911; high school diploma required for admission. The new engineering building possesses all the best features of the latest engineering schools. Address Loyola Avenue and Sheridan Road.

PHARMACY DEPARTMENT—In point of teaching and equipment has taken its place among the recognized institutions of the country. Address Loyola Avenue and Sheridan Road.

COLLEGE OF ARTS AND SCIENCES—St. Ignatius College, 1076 W. 12th Street. Gives thorough instruction in Philosophy, Higher Mathematics, the Natural Sciences, Ancient and Modern Languages, Literature, History, etc.

THE HIGH SCHOOLS—St. Ignatius High School, 1076 W. 12th Street, and Loyola Academy, Loyola Avenue and Sheridan Road, admit pupils who have finished eighth grade and take them through the usual high school studies.

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Loyola University Bulletin

DEC 2 1920

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1915

CHICAGO, ILLINOIS

Forty-Fifth Annual
Announcement

of

St. Ignatius College

Department *of* Arts *and* Sciences

of

Loyola University

1915

DEC 2 . 1920

1076 West Twelfth Street
CHICAGO

LOYOLA
UNIVERSITY
PRESS

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Rev. JOHN P. HOGAN, S. J.,
CHAPLAIN.

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CURATOR OF MUSEUMS.

EDWARD J. KIEFFER, M. D.,
PHYSICIAN.

JOHN B. MURPHY, A. M., M. D., LL. D.,
SURGEON.

GEORGE W. MAHONEY, M. D.,
OCULIST.

College of Arts and Sciences

PROSPECTUS.

Charter.—St. Ignatius College was erected in 1869 for the higher education of the Catholic youth of Chicago and vicinity. It is conducted by Fathers of the Society of Jesus. A charter was granted to the institution by the Legislature of the State of Illinois, June 30, 1870, with power to confer the usual degree in the various faculties of a University. On November 21, 1909, the college became the Department of Arts and Sciences of Loyola University.

Legal Title.—The legal title of the College for the purposes of bequests and donations is

ST. IGNATIUS COLLEGE OF CHICAGO, ILLINOIS.

Curriculum.—The studies pursued in the College comprise the Doctrines and Evidences of the Catholic Religion, Logic, Metaphysics, Ethics, Astronomy, Physics, Chemistry, Botany, Biology, Physiology, Mathematics, Rhetoric, Composition, Elocution, History, the Latin, Greek, English, German and French Languages and Literature.

Location and Buildings.—St. Ignatius College is located at 1076 West Twelfth Street. Its central location makes it easy of access even from the remotest sections of the city. The buildings contain valuable Mineralogical and Natural History Museums, and a library of 50,000 volumes, a department of which is reserved for the students. The class-rooms are well lighted and comfortable; there is a gymnasium, provided with lockers and shower-baths, and, in general, the College has all the equipment needed for the convenience, comfort, and mental and physical development of the students. The Department of Physics has an ample lecture room, and laboratories fitted with all the up-to-date apparatus required for experimental purposes. The Department of Chemistry, in addition to its lecture room, has

eight large slate-topped tables for qualitative analysis, so arranged as to accommodate eighty students.

Classical High Schools.—The better to secure the results aimed at in its educational work, and to arrange a more perfect co-ordination between High School and Collegiate studies, the University has deemed it advisable to maintain a closely affiliated system of Classical High Schools. Their purpose is to fit their pupils to meet the College entrance requirements by offering a programme of studies based upon those fundamental principles which, in the judgment of the Faculty, underlie alike the work of the High School and the College. At present these schools number two: The St. Ignatius Academy, 1076 W. Twelfth Street, and Loyola Academy, Hayes and Sheridan Road.

GENERAL REGULATIONS.

No Boarding.—The College is intended for day scholars only. Students who live at a distance are not advised to take lodgings in the city, unless they are of a mature age and of a steady disposition.

Entrance.—Candidates for entrance are examined and placed in the class for which their previous attainments have qualified them; and they are expected to bring testimonials from the school which they have last attended.

No one is barred from matriculation on account of his religious opinions, though all are required to show a respectful demeanor during the ordinary exercises of public prayer.

Distribution of Time.—The Academic Year consists of one session, beginning the first week of September and ending in the latter part of June, when the Annual Commencement, the Conferring of Degrees and the Distributions of Premiums take place.

The College is open every morning at half-past 7 o'clock. Those who come before the time of class proceed at once to the class-rooms and spend the interval in private study. All are required to be present five minutes before half-past 8 o'clock, at which hour the Catholic students hear Mass. The regular

class exercises begin immediately after Mass and close at 3 p. m.

Thursday is the weekly recreation day.

Attendance.—As regular attendance is an important element in class-standing and an essential condition for successful work, students must not be detained or withdrawn from classes except for very grave reasons. For absence, or for permission to withdraw before the close of the daily session, a note from the parent or guardian will invariably be required. Mere absence does not excuse a student from the obligation of preparing his ordinary recitation or relieve him from any part of his examinations. Frequent absence or tardiness, except on account of sickness, is sufficient cause for dismissal. Students are required to be present eighty-five per cent of the school year to merit promotion in June.

Sickness, however, will be considered a valid excuse, provided a doctor's certificate be presented after an absence of a week or longer.

Home Study.—All the endeavors of the Faculty will fail to insure success for the students unless they apply themselves to their studies with diligence and constancy outside of class hours. Approximately twenty-five hours each week are spent in class work; and to prepare recitations and exercises for this work, as well as to review the matter previously seen, at least three hours of home study daily are required. Parents and guardians are, therefore, respectfully urged to insist on this application.

Communications.—Due notice should be given to the Vice-President of a change of residence, or of the contemplated withdrawal of a student.

Examinations and Premiums.—Written competitions are made by the students three times a year. The class-standing of the students, as well as the honors and premiums, are determined partly by these competitions and partly by the daily class-work, each counting one-half.

These competitions take place at the end of the months of November, January and March, the first two being followed by

a public distribution of premiums and the reading of the percentages obtained by the students.

The medals and prizes given on Commencement Day are awarded in accordance with the results of the quarterly competitions. These prizes are: the medal of excellence for the highest average in the class; first and second honors for a yearly percentage of 90 and 85, respectively. Markings are on the scale of 100. An average below 75 shows an unsatisfactory standing; an average below 70 is failure to pass.

Discipline.—Though the government of the Institution is mild rather than severe, yet, for the maintaining of order and discipline, without which there can be no training nor development of character, the students are required to be obedient, earnest in study, punctual, and refined of manner; any serious neglect in these essential points rendering the offender liable to effective correction and even to dismissal.

Conduct Outside the Premises.—For faults committed outside the premises, the officers of the College do not consider themselves responsible, as students cease then to be under their jurisdiction; still, in justice to the reputation of the College, the authorities will hold students strictly accountable for offenses of this nature.

Luncheon.—Dining rooms have been fitted up for the students, and placed in charge of a reliable caterer, so that students who desire a warm luncheon at the noon hour may be able to obtain it without leaving the premises.

Students are not allowed to leave the premises between the sessions without a written request from their parents or guardians to take lunch elsewhere.

EXPENSES.

Since the institution is not endowed, it is entirely dependent for support on the fees paid for tuition.

Tuition per session of ten months, for all classes, $60.

Students of General Chemistry and Physics pay $10 per session.

Students engaged in Laboratory work deposit $5 with the Treasurer at the beginning of the Course, to pay for chemicals and breakage.

Library fee of $1 for all.

Diplomas for Graduates in the Classical Course, $5.

For each conditional examination taken on the appointed day, a charge of $1 is made; if taken at another time, the charge is $2.

Payments for conditioned examinations must be made invariably before the examinations.

No extra charge is made for instruction in French, German or Vocal Culture.

The session is divided into quarters, which begin, respectively, about the 1st of September, the 15th of November, the 1st of February and the 15th of April.

Payments must be made quarterly or semi-annually in advance. No deduction is allowed for absence.

DEGREES.

According to the Act of the Legislature, under which St. Ignatius College was incorporated, its Board of Managers has power "to confer such academic degrees and honors as are conferred by colleges and universities of the United States."

DEGREES IN REGULAR COURSE.

The degree of Bachelor of Arts (A. B.) is conferred upon those who successfully complete the course outlined below.

The degree of Bachelor of Science (B. S.) is conferred upon those students who have satisfactorily completed the combined College and Medical course—six years; also on those who have completed the four years' College Course, with the exception of either Latin or Greek or both, in place of which studies one modern language for two years and a group of subjects from the Natural Sciences and Mathematics, assigned by the Dean of the College.

For the degree of Bachelor of Literature (Litt. B.) or Bachelor of Philosophy (Ph. B.) four years of college work are required. The candidate must do special work in English, in one modern language, and in philosophy. He must pass all examinations, written and oral, with due credit, and submit a thesis.

The degree of Master of Arts (M. A.) or Master of Science (M. S.) can be obtained by one year of graduate study in residence. Examinations and a written thesis are required for these degrees.

No degrees will be given to those who have not satisfied their obligations to the institution.

Honorary degrees are conferred at the discretion of the Board of Trustees upon those who have distinguished themselves in literature, science, or the professions.

COMBINED COURSE.

Announcement.—In the College Course proper, an outline of which is given below, the prescribed studies for Junior Year are English, Logic, Metaphysics, Psychology and Evidences of Christianity—a total of fourteen hours; the prescribed studies for Senior Year are English, Ethics, Theodicy and Evidences of Christianity—a total of eleven hours. Students who desire an A. B. or a B. S. degree must devote eight hours a week to elective studies in the Junior Year and eleven hours a week in the Senior Year. With the approval of the Vice-President of the College, the elective branches may be taken from the studies mentioned in the "Outline of the College Course." But candidates for the combined course of A. B. or B. S., that is, those who intend to take up Law or Medicine, in combination with a College Course, may elect, during their Junior and Senior Years at College, equivalent work to be done in the School of Medicine or Law. At the end of their Senior College Year they will receive their A. B. or B. S. degree, due credit being given them in the School of Medicine and Law, for the work they have accomplished there during their Junior and Senior Years at College.

SCHOLARSHIPS.

Friends of education who wish to donate scholarships can found one in perpetuity by giving the sum of Fifteen Hundred Dollars. Sixty Dollars will provide an annual scholarship.

The following are now held by the College:

PERPETUAL

The Miss Eliza McConville Scholarship.
Memorial Scholarship: Margaret Gertrude Onahan.
Damen Council, 650, Knights of Columbus, Scholarship.
The Hon. William J. Onahan Scholarship.
The Hon. Charles A. Mair Scholarship.
The Hon. Thomas Brenan Scholarship.
Memorial Scholarship: Mrs. Mary White Riordan.
The Henry Venn, A. B., Class of 1906, Scholarship.
Memorial Scholarship: Mr. and Mrs. Pancratius Metz.
The Mr. and Mrs. Michael J. Riordan Scholarship.

ANNUAL

The De Soto Council, Knights of Columbus, Scholarship.
The Rev. Henry J. Dumbach, S. J., Scholarship: Mr. Andrew Maguire.
The Illinois Council, Knights of Columbus, Scholarship.

SPECIAL PRIZES.

Intercollegiate English Prize.—A purse of $100.00 ($50.00 for the first prize, $20.00 for the second, $15.00 for the third, $10.00 for the fourth, and $5.00 for the fifth) is offered yearly by Mr. D. F. Bremner, of Chicago, for excellence in English essay writing. The purse is open to the competition of the Jesuit Colleges of the Missouri Province, which are:

St. Louis University, St. Louis, Mo.
St. Xavier College, Cincinnati, Ohio.
St. Ignatius College, Chicago, Ill.
St. Mary's College, St. Marys, Kan.
Creighton University, Omaha, Neb.
Detroit College, Detroit, Mich.
Marquette University, Milwaukee, Wis.

St. John's College, Belize, British Honduras.
St. Ignatius College, Cleveland, Ohio.
St. John's University, Toledo, Ohio.
Sacred Heart College, Prairie du Chien, Wis.

Intercollegiate Latin Prize.—For the best Latin essay from competitors of the same colleges, a gold medal is offered by Very Rev. Father Provincial.

The Alumni Medal.—A gold medal for the Highest Honors of the Senior Class is offered by the Alumni Association of Loyola University.

The John Naghten Debate Medal.—Mr. John Naghten has offered a gold medal to be awarded to that member of the Loyola Oratorical Association who shall deliver the best speech in the annual Public Debate of the Society.

The Harrison Oratorical Medal.—A gold medal is offered by Hon. Carter H. Harrison, LL. D., for the best oration delivered in the Oratorical Contest, which is open to the students of the Senior, Junior, Sophomore and Freshman Classes.

The Dumbach Chemistry Medal.—A gold medal is offered in memory of Rev. H. J. Dumbach, S. J., by Mr. Andrew Maguire to the student who makes the best examination in Chemistry.

The Clifford Medal of Excellence.—A gold medal is offered by Hon. R. W. Clifford for the Highest Honors in the collective branches of the Junior Class.

The Murphy Medal of Excellence.—A gold medal is offered by Dr. John B. Murphy for the Highest Honors in the collective branches in the Sophomore Class.

The Gibbons Medal of Excellence.—A gold medal is offered by Hon. John Gibbons for the Highest Honors in the collective branches in the Freshman Class.

The Joseph Magee Elocution Medal.—A gold medal is offered by Mr. Joseph Magee for excellence in Elocution.

SOCIETIES.

St. Ignatius College, like other centers of learning, has always been ready to sanction and encourage such societies as tend to promote the various interests of the students. The following societies in particular are deemed worthy of special mention:

THE ALUMNI ASSOCIATION

was organized February 10, 1895. Its object is to preserve and strengthen the ties of fellow-feeling and friendship among former students of the College, and to afford them an opportunity of showing their attachment and esteem for their Alma Mater. Any graduate or student of the College, or of any Jesuit College or University, may apply for membership.

THE SODALITY

has for its object the cultivation in its members of an earnest religious spirit and a tender devotion to the Mother of God. It was established November 3, 1872. It was aggregated to the Sodality of Rome, under the title of "Our Lady Help of Christians," and under the patronage of St. Aloysius, on the 19th day of January, 1873.

THE LOYOLA ORATORICAL ASSOCIATION

was organized on the 10th of November, 1875. It affords opportunity for acquiring skill in the art of speaking, gives much useful information to its members, and develops in them a taste for literary studies. Many of the former members of this society attribute much of their success in life to the address and readiness of debate which they acquired during their term of membership. The usual exercises at the weekly meetings are the reading of original essays and the discussion of subjects of debate approved by the President.

THE GYMNASIUM AND ATHLETIC ASSOCIATION

was formed to encourage physical exercise, and to create and foster a college spirit among the students. It has a Gymnasium

which is fitted out with suitable apparatus, and in which regular instruction is given by a competent athletic instructor. The football and baseball teams do much to make college life pleasant, and the laurels they are accustomed to win on local fields are much appreciated by their fellow-students.

THE STUDENTS' LIBRARY ASSOCIATION

The Students' Library was established with the view of forming in the students a correct literary taste, and of safeguarding them against the many dangers of indiscriminate reading. Students are strongly encouraged to supplement their regular class work by a judicious course of reading under the direction of their professor. The library has a goodly number of volumes; in connection with the library is a reading room well stocked with the standard magazines of the day.

THE ORCHESTRA

The College Orchestra held its first rehearsal on October 2, 1900. Its purpose is to develop the musical talent of the students, and to encourage them to aim at proficiency in instrumental music.

THE GLEE CLUB

while giving pleasant recreation to its members, adds much to the enjoyment of College celebrations.

THE LOYOLA UNIVERSITY MAGAZINE

published quarterly by the students, is intended to foster literary efforts in the students of the present, to chronicle College doings and to serve as a means of intercommunication with the students of the past.

It was established in 1902.

Officers of Societies

LOYOLA UNIVERSITY ALUMNI ASSOCIATION

PRESIDENT
PAYTON J. TUOHY

VICE-PRESIDENT
CHARLES E. BYRNE

HONORARY VICE-PRESIDENTS
ANTHONY SCHAGER, '70's
WILLIAM N. BROWN, '80's
JOSEPH H. FINN, '90's
RALPH C. SULLIVAN, M. D., '00's
AUGUSTINE J. BOWE, '10's

RECORDING SECRETARY
JAMES FITZGERALD

CORRESPONDING SECRETARY
PHILIP J. CARLIN

TREASURER
M. MALACHY FOLEY

HISTORIAN
REV. WILLIAM MURPHY, D. D.

EXECUTIVE COMMITTEE
LEO J. DOYLE
E. F. GARRAGHAN, M. D.
BERNARD McDEVITT
JOSEPH CONNELL
J. W. DAVIS
FRANK O'BYRNE

MODERATOR
REV. PATRICK A. MULLENS, S.J.

SODALITY OF THE BLESSED VIRGIN MARY

DIRECTOR

REV. EUGENE A. MAGEVNEY, S. J.
REV. WM. E. COGLEY, S. J.

First Term		Second Term
EDWARD AMBERG	PREFECT	JAMES KEHOE
JAMES KEHOE	FIRST ASSISTANT	LAMBERT K. HAYES
JOHN PETERSON	SECOND ASSISTANT	FRANCIS S. WARZYNSKI
STANISLAUS G. RUDZIEWICZ	SECRETARY	IGNATIUS P. WALSH
EARL KING	TREASURER	JOSEPH SHORTALL
FRANCIS WARZYNSKI EDWARD REYNOLDS IGNATIUS P. WALSH EUGENE ZAHRINGER	CONSULTORS	EDWARD AMBERG JAMES LARKIN EDWARD DUNNE MARCUS RYAN
ERNEST THIELE JAMES HANRAHAN PETER NOLAN PETER WITMANSKI	SACRISTANS	CLARENCE MURPHY JEROME JACOBSEN WALTER QUIGLEY RAYMUND LUNDY

LOYOLA ORATORICAL ASSOCIATION

REV. EUGENE A. MAGEVNEY, S. J.

PRESIDENT

First Term		Second Term
LAMBERT K. HAYES	VICE-PRESIDENT	JOSEPH W. BYRNES
LEO E. McGIVENA	RECORDING SECRETARY	JOHN G. PETERSON
WALTER T. QUIGLEY	CORRESPONDING SECRETARY	JOSEPH SHORTALL
JAMES KEHOE	TREASURER	JAMES KEHOE
STEPHEN A. RUTKOWSKI	FIRST CENSOR	WALTER T. QUIGLEY
JAMES P. MOLLOY	SECOND CENSOR	JAMES KEHOE

COMMITTEE ON PROGRAMS

EDWARD AMBERG ERNEST W. THIELE IGNATIUS P. WALSH	CHAIRMAN	EDWARD AMBERG ERNEST W. THIELE IGNATIUS P. WALSH

LOYOLA UNIVERSITY MAGAZINE

LAMBERT K. HAYES, '15, Editor

JOSEPH BYRNES, '15
EDWARD J. AMBERG, '15
JAMES E. KEHOE, '15
EARL D. KING, '15
LEO E. McGIVENA, '16

Associate Editors

CHARLES N. LISCHKA, '16
IGNATIUS P. WALSH, '17
JAMES T. MANGAN, '17
ERNESTE A. BEAUVAIS, '17
EDWARD J. DUFFY, '17

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RALPH A. KONLE, '15, Medicine
EDWARD POHLMANN, '18, Engineering
WALTER A. WADE, '15, Law
FRANK J. BURNS, '15, Pharmacy
S. A. RILEY, Sociology

Business Managers

EUGENE ZAHRINGER, '18 STANLEY PROBST, '18
JOHN V. RYAN, '17

ST. IGNATIUS COLLEGE ATHLETIC ASSOCIATION

JAMES F. WALSH, S. J., Director

President.....John B. Carbery
Vice-President.....Thomas F. Kelly
Secretary.....Edward E. Caverley
Treasurer.....James E. Kehoe
Football Manager.....Edward E. Caverley
Basket-Ball Manager.....James E. Kehoe
Baseball Manager.....Lambert K. Hayes

GENERAL ANNOUNCEMENT FOR 1914-1915.

Matriculation. In order to facilitate the examination of new students, applicants should present themselves as soon as possible after August 15. Office hours from 9 to 12 A. M.

Examination of Conditioned Students will take place on the following dates:

Tuesday, August 24.—Latin, Greek and English.

Wednesday, August 25.—History, Mathematics and Science.

Entrance Examinations will be held on Friday, August 27, and Saturday, August 28.

Fall Term.—Registration.—September 2, 3, 4. Classes begin Tuesday, September 6.

Faculty

REV. PATRICK A. MULLENS, S.J.
PHILOSOPHY

REV. EUGENE A. MAGEVNEY, S.J.
LATIN

MR. FRANCIS P. BUNGART, S.J.
LATIN

MR. CLAUDE J. BAKEWELL, S.J.
GREEK

REV. ARNOLD J. GARVY, S.J.
ENGLISH

REV. WILLIAM P. LYONS, S.J.
HISTORY
RELIGION

REV. JAMES L. McGEARY, S.J.
PHYSICS
MATHEMATICS

REV. EDWARD J. CALHOUN, S.J.
CHEMISTRY
MATHEMATICS

REV. CHARLES COPPENS, S.J.
FRENCH
RELIGION
HISTORY OF PHILOSOPHY

REV. AUGUSTINE M. EFFINGER, S.J.
HISTORY
POLITICAL ECONOMY

The College

The College Course extends through four years and embraces instruction in the departments of Philosophy, Language, Literature, History, Science, and Mathematics. The aim of the course is to give the student a complete liberal education, which will train and develop all powers of the mind, and will cultivate no one faculty to an exaggerated degree at the expense of the others. The college ideal is not to foster specialization, but to cultivate the mind, to build up and strengthen true character, and to impart that accuracy of thought and reasoning and that breadth of view which must ever be the foundation as well of more advanced scholarship as of eminence in the professions or other stations in life.

To attain this end, the studies prescribed in this course, and leading up to the degree of Bachelor of Arts, are regarded as fundamental and essential in a liberal education, and therefore are not left to the student's option. It is especially to be noted that practically all the studies in the Freshman and Sophomore years are prescribed. Only in the Junior and Senior years do some of the studies become elective.

ENTRANCE REQUIREMENTS.

1. All applicants for admission to the College Department of Loyola University must give satisfactory evidence of good moral character.

2. Candidates who have satisfactorily completed the course prescribed by the Academies of Loyola University will be admitted without examination.

3. Graduates from other Academies or High Schools will be admitted without examination, if they present evidence that they have completed the work equivalent to that required by the course in the Academies of the Loyola University, as set forth in their catalogue.

4. All other applicants for admission, who wish to enter as candidates for the A. B. Degree, will be required to pass a satisfactory examination in the following subjects:

Latin.—Authors: Caesar's Gallic War, four books; Nepos' Lives (6) may be taken in place of two books of Caesar; Cicero's Orations against Catiline and for Archias; Cicero's De Senectute and Sallust's Catiline or Jurgurthine War may be taken as substitutes for three of the above orations; Virgil, four books of the Aeneid, or their equivalent from the Eclogues, Georgics, and Ovid's Metamorphoses.

Grammar and Composition.—The examination in Grammar and Composition will require a thorough knowledge of the whole Latin grammar, together with such facility in writing Latin Prose as is acquired by one who satisfactorily completes the course of exercises prescribed by the Academies of the University. This course is based on Arnold's Latin Composition, for which see catalogues of the Academies.

Greek.—Authors: Xenophon's Anabasis, four books or their equivalent; Homer's Iliad or Odyssey, one book.

Grammar and Composition.—The examination in Grammar will require a thorough knowledge of etymology, of the syntax of cases, the rules of concord and prepositions. The theme will be based on Xenophon, and will test the candidate's ability to translate into Greek simple sentences, with special reference to the use of forms, particularly of the irregular verbs and the common rules of syntax.

English.—Texts Prescribed for Reading and Study: Two plays of Shakespeare, Burke's Conciliation with the Colonies or American Taxation; Irving's Sketch Book; one essay of Macaulay; Scott's Lady of the Lake; Goldsmith's Deserted Village; Tennyson's The Passing of Arthur; Lowell's Vision of Sir Launfal; Coleridge's Ancient Mariner.

The applicant should make himself familiar with the characters, the plot, incidents and characteristic diction of each work. Equivalents will be accepted.

Rhetoric and Composition.—The applicant will be examined on the principles of rhetoric as set forth in Brooks' English Composition, Book II, or in a work of equal standing. The composition will test the candidate's ability to write clear, idiomatic English. The subject will be taken from his experience and observation, or from the books he presents for examination. The spelling and punctuation must be correct, the sentences well constructed. The writer must show some discrimination in the choice of words and ability to construct well ordered paragraphs.

Mathematics.—Algebra to Indeterminate Equations (included). Plane and Solid Geometry, Plane Trigonometry.

History.—Greek and Roman History to the Fifth Century, A. D.; History of the United States; Modern History; Migrations of Nations to Renaissance.

Civics.—J. W. Garner, Lessons in Civil Government.

5. Students who have not taken up the study of Latin or Greek in the Academy or High School are admitted to the Collegiate course leading to the Degree of Bachelor of Science. They will be required to present credits in one modern language and the natural sciences equivalent to those granted in Latin or Greek or both.

COLLEGE CLASSES.

Freshman Class.—The object of this class is the cultivation in a special manner of literary taste and style, which is to be effected chiefly by the study of the best poets and prose writers. The Greek and Latin classics are studied for this purpose, together with such English writers as are noted for the highest qualities of literary substance and form. Special emphasis is laid on the study of poetry. Moreover, in this class, as in the others of the course, the literary work is supplemented by that training in Mathematics, Science and History which is required by a liberal education.

Sophomore Class.—The work of this year centers on the study of Oratory and Historical Composition. The nature and types of Oratory, principles of argumentation, the nature and requirements of historical writing, are thoroughly investigated—the best models, ancient and modern, forming the subject-matter of study. Thus, while perfecting literary taste, the class is intended to develop that grasp and perspective of structure without which composition on a large scale is impossible.

Junior Class.—The object of this class is to form the mind to habits of correct reason and to impart sound principles of philosophy. Logic, Rational Philosophy—being, causality, the nature of matter; the human soul, its nature, origin, operation, etc.—are the chief subjects of study. The additional training received from the study of the history of Philosophy and various literary topics is by no means neglected.

Senior Class.—The study of Philosophy is continued this year in courses on the two important subjects of Natural Theology and Ethics. These courses treating of the existence of God, the origin of Moral Obligation, the Natural Law, Duties and Rights, etc., form the crowning work of a liberal education. Their aim is to teach sound principles of conduct, to give the students clear ideas on the purpose and destiny of man, and on the problems of life and their solution, as furnished by ethical principles.

DEPARTMENT OF PHILOSOPHY.

I. LOGIC.

A. Formal Logic or Dialectics.

1. Definition. General idea of reasoning. Logic; natural and scientific.
2. Elements of Logic.
   (*a*) Material Elements. Acts of the mind; ideas, judgments, reasoning; their nature, kinds, properties and external expression.
   (*b*) Formal Element. Inference from a combination of judgments; its requisites, external expression. Principles and laws of reasoning. Forms of Argumentation.
3. Kinds of Reasoning.
   (*a*) Deductive. The Syllogism; demonstrative, probable, sophistic. Fallacies.

(*b*) Inductive. Its nature, requisites, use and abuse.
4. How to build an argument. Invention, definition, division.
5. Method, analytic, synthetic. Science.

B. Material Logic or Criteriology.
1. Truth, its nature, kinds.
2. Logical truth; its attainment; states of the mind with regard to truth.
3. Certitude, its nature, kinds.
4. Skepticism. Kinds: Universal, Methodical Doubt, Agnosticism, Materialism, Positivism, Idealism, Christian Science, Rationalism, Traditionalism.
5. Means of attaining truth. Our cognoscitive faculties; senses, external and internal; intellect. Authority.
6. Criteria of truth; proximate, ultimate.

II. METAPHYSICS.

A. General Metaphysics or Ontology.
1. Being. Objective Concept. Essence.
2. States of Being. Existence. Possibility, internal, external. Source of internal possibility.
3. Transcendental properties of Being: one, true, good.
4. Kinds of Being: Substance and Accident.
(*a*) Notion of Substance.
(*b*) Nature, Individual, Supposite, Person.
5. Notion of accident.
(*a*) Existence of accident separate from substance.
(*b*) Species of accidents.
(*c*) Space, place. Compenetration, Multilocation.
6. Causes of Being.
7. Perfection of Being.
(*a*) Finite, infinite.
(*b*) Contingent, necessary.
(*c*) Time, Eternity.
(*d*) Order, beauty, sublimity.

B. Special Metaphysics.
1. Cosmology.
(*a*) Origin of the World. Materialism. Pantheism. Creation. Age of the World. Atheistic and Theistic Evolution. End of Creation.
(*b*) Constitution of Bodies.
(*c*) Organic bodies. Life. Degrees and Functions. Senses. Experimental psychology.
2. Rational Psychology.
(*a*) Nature of the human soul. Union with body.
(*b*) Properties: Spiritual, immortal.
(c) Faculties: 1. Cognoscitive. Intellect. Acts. Origin of Ideas. 2. Appetite. Rational, the Will. Liberty.
3. Natural Theology.
(*a*) God, not Nature, nor Power behind Nature, nor World soul or

spirit, but a Personal Being distinct from the Universe. Pantheism, Atheism, Agnosticism.

(b) His existence known not immediately, nor by intuition, nor by an innate idea, but by a posterior demonstration.

(c) Essence of God. Self-existence. Necessary, Infinite, Eternal, Immutable, Immense.

(d) Attributes: Unity. Simplicity. Polytheism. Dualism. Anthropomorphism. Origin of evil, Physical and Moral.

(e) Knowledge of God.

(f) Will of God.

(g) Influx into creatures. Creation. Conservation. Concourse.

(h) Providence. Distribution of temporal good and evil.

III. ETHICS OR MORAL PHILOSOPHY.

Definition. Truths assumed from Metaphysics.

A. General Ethics.

1. Subjective and Objective ultimate end of Man.
2. Human action. Imputability. Merit. Impediments.
3. Origin of morality of human action in the abstract and in the concrete.
4. Norm of Human Action.
   (a) External Norm. Law, External, Natural, Positive, divine and human Obligation.
   (b) Internal Norm. Conscience.

B. Applied Ethics.

1. Rights and Duties. Relation to others as individuals.
   (a) Duties to God.
   (b) Duties to Self—Suicide. Danger.
   (c) Duties to Fellow-Men. Love. Enemies.
      1. To their Souls:
         (a) To their intellect. Lying. Mental Reservation.
         (b) To their will.
      2. To their body. Self-defense.
      3. To their honor. Dueling.
      4. To their property. Right of private property in abstract. Communism. Socialism. Single Tax. Right to private property in the concrete.
      5. Ways of acquiring property.
   (d) Restitution.
2. Society. Relations to others as members of society.
   (a) Definition of Society.
   (b) Origin of society in the abstract. Man social by nature. Hobbes. Rousseau. In the concrete, some human fact.
   (c) Kinds of society. Primary: the family, state and church. Secondary Societies.
      (a) The family:
         1. Marriage, of divine institution; hence, in its essentials, independent of civil authority.
         2. Properties: Unity and Indissolubility; hence divorce

impossible by human authority.

(*b*) Civil Society.

1. Origin in general from God. Its form determined by some human fact.
2. The family, its unit.
3. Its proximate and ultimate end.
4. Civil authority in the abstract from God; hence the absurdity of the Social Contract of Rousseau; in the concrete, determined by some human fact.
5. Forms of civil society. Stability, Liberty, true and false.
6. Tyranny. Usurpation. Transmission of civil authority.
7. Constitution, natural and written.
8. Minor societies. Right to existence and self-government. Secret societies. Relation to primary societies.
9. Functions of the supreme authority; legislative, judicial, executive; taxation, militia, capital punishment.
10. Social Order:
    (*a*) Material order. Political Economy.
    (*b*) Moral order. Religion. Union of State and Church. Liberty of Conscience. Toleration; dogmatic, personal, civil. Liberty of speech and of the press. Education. Common Schools.
11. Civilization.

(*c*) International Society.

1. International Law. Sources.
2. War.
3. Intervention.

(*d*) Religious Society. The Church.

1. Origin. End.
2. Nature. Rights.
3. Relation to Civil Society.
4. Supreme Authority. Independent of the State. Investiture. Secular Arm. Veto of Secular Rulers in the Election of the Pope.

The number of periods indicates the amount of time given to a subject per week. A period, unless otherwise specified, stands for fifty minutes.

LATIN.

FRESHMAN CLASS.

(Five periods of 60 minutes each.)

Precepts: A thorough review of Latin prosody and versification.

Authors—First term: Horace, Ars Poetica; Virgil, Aeneid, books 3, 5 and 6; Livy, books 1 and 21.

Second term: Livy, books 21; Horace, Select Odes.

Sight Reading: Selections from Christian Hymnology; Livy.

Practice—Both terms: Bradley's Aids to Writing Latin Prose, Part I, and selections from Part II to Exercise 60. Two themes a week. A theme in imitation of the prose authors studied about every fortnight.

Memory: From the authors read in class.

SOPHOMORE CLASS.

(Five periods of 60 minutes each.)

Authors—First term: Cicero, Pro Lege Manilia; Horace, Select Odes.

Second term: Horace, Epodes, Epistles and Satires; Tacitus, Agricola.

Sight Reading: Selections from the authors assigned above; Tacitus, Germania or Annals; Selections from the Latin Fathers.

Practice—Both Terms: Bradley's Aids, selections from Part II, from Exercise 50 to end of book. Two themes a week. One composition every fortnight in imitation of the authors studied. Off-hand translation from English into Latin.

Memory: Select passages from the authors read.

JUNIOR CLASS.

(Three Hours.)

Authors—First term: Cicero, Quaestiones Tusculanae; Plautus, Duo Captivi; History of Latin Literature, Mackail (Scribner's), for reference. Essays in Latin, Bradley's Aids.

Second term: Cicero, Quaestiones Tusculanae, continued; Pliny, Letters; Juvenal, Selections; Selections from the Latin Fathers. Essays in Latin.

GREEK.

FRESHMAN CLASS.

(Five Periods.)

Precepts—First term: The syntax of the verb repeated; general rules of quantity in connection with the author; the Homeric dialect, cf. Kaegi Kleist, Nos. 209-215. Brief sketch of Greek Epic and Lyric poetry. Cf. Jebb's Classical Greek Poetry.

Second term: The precepts of the first term thoroughly repeated.

Authors—Both terms: Plato, Apology or Crito; Homer, Iliad, selections from books 2, 3, 4, 6.

Sight Reading—Both terms: The New Testament or selections from the authors read in class.

Practice—Both terms: A written theme once a week, based on the authors studied and illustrating the syntax of Attic Greek; or Kaegi-Kleist Exercise Book 2, Nos. 52-66.

Frequent written reviews in class.

SOPHOMORE CLASS.

(Five Periods.)

Authors—First term: Demosthenes' Philippics. Analysis of first or third Philippic to be seen in detail.

Second term: Demosthenes on the Crown, with detailed analysis. Sophocles, Antigone, Oedipus Tyrannus or Oedipus Coloneus.

Sight Reading—Both terms: The New Testament or St. Chrysostom, Eutropius, or St. Basil.

Practice—Both terms: Easy themes built on sentences in the text, once a week. Frequent written reviews.

JUNIOR CLASS.

(Three Periods.)

Authors—Both terms: Plato, Phaedo, analysis; Keep's Stories from Herodotus; Aeschylus, Prometheus Bound or Agamemnon.

ENGLISH.

FRESHMAN CLASS.

(Five Periods.)

Precepts: Literary Aesthetics; Theory of the Beautiful, of the Sublime; Taste; Imagination; Theory of Literature; Poetics; Nature and kinds of poetry; elements of poetic substance and form; characteristics of Lyric and Epic Poetry. Fiction: Constructive principles of story-writing; elements of Fiction, viz., plot, character, situation, purpose; Realism and Romanticism in Fiction; development of the English Novel.

Text-book: Coppens' Introduction, with Professor's Notes.

Texts for study: Newman's Lecture on Literature and Essay on Aristotle's Poetics; Selections from Newman, Ruskin, De Quincey, Milton, Coleridge, Wordsworth, Keats, Tennyson, DeVere.

History of English Literature and Criticism. Anglo-Saxon, Semi-Saxon, Old English and Middle English Periods; the Elizabethan Age; The Transition Period; The Classical Age.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week on subjects chiefly literary.

SOPHOMORE CLASS.

(Five Periods.)

Precepts: Oratory: Nature and types of oratory; division of the oration; style in public speaking; methods of oratorical composition; principles of argumentation.

Text-book: Coppens' Art of Oratorical Composition.

History: Principles of historical composition; ethical requirements of history; representative English and American historians.

Texts for study: Burke's speech on American Taxation and Address to the Electors of Bristol; Webster's Reply to Hayne, Girard College Case, Knapp Trial, Commemorative Address on Adams and Jefferson; Newman's Second Spring. Other speeches of Webster, Calhoun and Clay. Famous French Orators.

History of English Literature and Criticism: The Romantic School of the Nineteenth Century; American Literature.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week. Analysis and criticism of speeches.

JUNIOR CLASS.

(Four Periods.)

Precepts: The Drama; laws and technique; theory of the Tragic; of the Comic.

Texts for study: Shakespeare's Plays; interpretation, critical and comparative study.

Practice: One composition a week or every fortnight. Essays, critical and philosophical.

SENIOR CLASS.

(Four Periods.)

Precepts: Theory of expository writing; the critical and philosophical essay; stylistic and structural requirements; historical development of the English essay.

Texts for study: Essays of Macaulay, Newman, Brownson, Archbishop

Spalding, etc. Analysis and comparative study of essays, with the emphasis laid on substance and structural organization.

Practice: One composition a week or every fortnight. Subjects chiefly critical and philosophical.

MATHEMATICS.

FRESHMAN CLASS.

(Three Periods.)

First term: Algebra, c. 22, Choice, etc., to end of book.

Second term: Analytical Geometry, four chapters to Parabola excl., supplementary propositions.

SOPHOMORE CLASS.

(Three Periods.)

First term: Analytical Geometry, Parabola to end of book.

Second term: Calculus.

JUNIOR CLASS.

(Two Periods.)

Both terms: Calculus continued and finished.

Text-books: Wentworth's Complete Algebra and Analytical Geometry; Murray's Calculus.

HISTORY.

FRESHMAN CLASS.

(Three Periods.)

This course deals with the causes which led to the revolutions against religious authority in Germany under Luther and in England under Henry VIII. It treats of the social upheavals and wars which followed from the religious rebellions. It embraces the period from the suppression of the Templars to the reign of Louis XIV.

The Renaissance; the causes of the Protestant Revolution; the Exile of the Papacy; the great Schism of the West; the Hundred Years' War; the Ottoman Empire; the Inquisition, universities, guilds.

The age of Charles V; the Protestant Revolution; Catholic Revival;

wars of the Protestant Revolution; the Huguenots; Thirty Years' War.

Spain and England; Spain in the New World; the Puritans; Age of Louis XIV.

Both terms: Guggenberger, History of the Christian Era, Vol. 2.

SOPHOMORE CLASS.

(Three Periods.)

This course deals with the social and political revolutions of the eighteenth and nineteenth centuries. It gives the long struggle of the people for greater rights and liberites. It begins with the Hanoverian Succession in England and ends with a brief account of contemporary history.

The Hanoverion Succession in England; the beginning of Russia; Wars of the Austrian Succession; Colonies of North America; Seven Years' War; Division of Poland.

Causes of the political and social revolutions of the eighteenth century; American War of Independence; French Revolution; Era of Napoleon; Catholic Emancipation in England.

Europe in the first half of the nineteenth century; Crimean War; Italy; Franco-German War; Civil War in the United States; great powers today; Church and State.

Both terms: Guggenberger, History of the Christian Era, Vol. 3.

JUNIOR AND SENIOR CLASSES.

(One Period.)

Both terms: Turner's History of Philosophy.

History of Philosophy embraces the historical development and scientific correlation of philosophical systems, with such additional information, biographical and otherwise, as may be needful for the fuller understanding of the subject. One lecture is delivered weekly, the students being required to furnish written dissertations upon the matter treated.

Ancient Philosophy. The Vedas. Theories of Egypt and Asia. The Ionic School. The Pythagoreans. The Sophists. The Socratic School. The Epicureans. The Stoics. The Sceptics. The Syncretists and Roman Philosophy. Jewish-Alexandrian Philosophy. Neo-Phythagoreanism. Neo-Platonism. The Fathers of the Church. The Gnostics. The Schoolmen. The Mystics. The Revival of Platonism, of Aristotelianism. Arabian and Jewish Philosophy.

Modern Philosophy. Descartes and his followers: Malebranche, Spinoza, Bayle, Locke, Hume, the Encyclopaedists, Leibnitz, Wolf, Berkley,

Rousseau. The Scottish School. The Transcendentalists, Kant, Fichte, Hegel, Schelling, and their Schools of Thought. Positivism, Modern Evolution Theories. The Neo-Scholastics. Thomistic Philosophy.

ASTRONOMY.

SENIOR CLASS.

(Two Periods.)

Young's Astronomy—historical, descriptive and practical. Lectures and recitations. For reference, Clerk's History of Astronomy, Newcomb's "The Stars," Lockyear, Langley.

GEOLOGY.

General course in structural, dynamic and historical geology. Study of the geology of Illinois. Field work. Petrology and Mineralogy. The college possesses a collection of the more important minerals and rocks; in addition to this, the students have access to the Field museum. Lectures, recitations and written exercises. For reference, Dana and Le Conte.

PHYSIOLOGY.

A course in which the student will be taught the main facts of Physiology, together with a general survey, gross and microscopic, of the mammalian organs and the fundamental mammalian tissues. Lectures, recitations, demonstrations and laboratory work. Specially adapted for those desiring to teach elementary Physiology in academies or high schools.

POLITICAL SCIENCE.

General Principles of Law: Municipal law; civil rights, contracts, real estate, criminal law. International law; its nature and authority; War and Peace, Rights and Duties of Belligerents; Rights and Duties of Neutrals.

General Principles of Government: State Governments. Constitution. Their nature, object, establishment. Departments; legislative, executive, judicial. The National Government: Origin, nature and growth. Its Function; the legislative, the judiciary, the executive.

CHEMISTRY.

Course I. General Inorganic Chemistry.—Prerequisite High School credits in Chemistry from an accredited High School or Academy.

The laboratory work aims at familiarizing the student with thee more common elements and their compounds. Moreover, it supplies the necessary empirical basis for understanding the laws and theories of Chemistry as explained in the lectures. Again, the powers of accurate observation are stimulated, and logical deduction, based on observation, inculcated.

Course II. Qualitative Analysis.—Prerequisite, Course I or its equivalent. This course aims at giving a thorough knowledge of the analytical reactions necessary for recognizing the common metals and acid radicals.

After a review of the theory of dissociation and mass action as fundamental principles of analytical procedure, balancing of equation for oxidation and reduction and methods of analysis are discussed.

Each student is required to systematize the Group manipulation from the manipulations of the individual metals. Refined inorganic tests for metals and acid radicals are included in the course.

A number of the "unknowns" are analyzed and reported on. These returns, together with repititions and written examinations at the end of the semester, are required for full credits.

Text: Otis C. Johnson, Analytical Equation; J. Stieglitz, Qualitative Chemical Analysis, Part III.

Reference: Prescott's Johnson; J. Stieglitz, Qualitative Chemical Analysis, Parts I and II.

PHYSICS.

A continuation of the High School Course involving a more extended development of the principles of Physics, the derivation and interpretation of formulas and their application to physical problems.

(a) Mechanics and Heat.—This course corresponds to the first half of College Physics. Lectures and Laboratory, embodying the theory as well as the accurate determination of physical constants; adjustments and use of instruments of precision; verification of laws of impact, torsion, rigidity, etc., Young's Modulus, Moment of Inertia. Determination of vapor pressures and densities; freezing and boiling points; specific heats; hygrometry.

(b) Light, Sound, Electricity.—In the continuation of College Physics the same analytic method is pursued in the discussion of the theories which underlie the phenomena of these subjects, and due emphasis is placed on the important applications of waves and harmonic motion to these phenomena. The Laboratory covers the laws of refraction, diffraction, spectrum analysis, photometry, polarization; stationary waves, Lissajous' curves; electrostatic induction, capacity of condenser, measurement of resistance, operation of dynamo, motor, alternator, and transformer.

Both Semesters, Lectures and Recitations three periods a week; Laboratory, two periods a week.

Prerequisites: Plane Trigonometry, Algebra, Geometry, High School Physics.

Text: Carhart's College Physics.

EVIDENCES OF RELIGION.

FRESHMAN CLASS.

(Two Periods.)

The Church as a Means of Salvation; The Last Things; The Christian's Duties Toward God, etc., Wilmer's, pp. 379 to 493, the part from p. 399 to p. 422, excl., being omitted.

SOPHOMORE CLASS.

(Two Periods.)

Grace; The Sacraments, etc., Wilmer's, pp. 279 to 379.

JUNIOR CLASS.

(Two Periods.)

The Creation of the World; the various grades of Creation, etc., Wilmer's, pp. 200 to 279; Christianity a Revealed Religion, etc., pp. 1 to 77.

SENIOR CLASS.

(Two Periods.)

The basis of Morality; Law as the Objective Norm of Human Actions, etc., Wilmer's, pp. 399 to 421; the Constitution of the Church, etc., Wilmer's, pp. 77 to 200.

PEDAGOGY.

As there is a growing tendency on the part of the graduates to enter the teaching profession, a course in pedagogy has been opened, which prepares the graduate to teach in high schools and normal schools, and to be principal of a four years' course high school.

Course 1. The History of Education. Three hours a week, one term. Text-book: Monroe.

A Survey of Greek and Roman Education; Plato's Republic, Aristotle's Politics, and Quintilian's Education of an Orator. Education in the Middle Ages. Drane's Christian Schools and Scholars, and Montalembert's Monks of the West. The Jesuit System of Education. Hughes and Schwickerath. La Salle, Quick, Montaigne, Locke, Rousseau, Froebel, Herbart. Present national school system.

Course 2. Theory and Art of Teaching. Three hours a week, one term.

This course consists of lectures, assigned reading, informal discussion and practice. It embraces school equipment, organization and management. The student will be enabled to make a thorough study of the public

and private schools of the city, the high schools and normal schools.

Course 3. Physiological Psychology. Five hours a week, one-half term.

This is a course in applied psychology and is intended to supplement the course of rational psychology.

Definitions, Methods. Organs and their functions. Cell Tissues, Nerves, Spinal Cord, Brain. Mechanical theory of nervous action, Excitation, Inhibition and Conduction.

Correlation of Sensation and Motion. Automatic, reflex and voluntary movements. Cerebral Localization. Speech and theories of the speech center, psychological explanation of its problems.

Stimulus, Genesis of Sensation, Composition of the Sense Percept (idea) —Basis in sensation of the time and space concept. Errors in special perception, in visual perception generally; monocular and binocular vision.

Measurement of sensation intensity. Weber's, Fechner's, Merkel's Law. Time, reactions for sensation, volition, thought. Influence of attention, fatigue, rhythm.

Feeling and Emotion. Apperception, Attention, Association.

References: Wundt, Human and Animal Psychology; Grundzügeder, Physiologischen Psychologie; James, Psychology; Ladd, Outlines of Physiological Psychology; Scripture, the New Psychology; Mayer, Psychology; Tichener, Experimental Psychology; Sandford, Experimental Psychology.

SCHEDULE OF CLASS PERIODS.

	Freshman Year	Sophomore Year	Junior Year	Senior Year
Philosophy			8	5
Latin	5	5	3E	
Greek	5	5	3E	
English	5	5	4	4
History	3	3	1E	1E
Mathematics	3	3	2E	
Chemistry	5			
Physics		5	4E	
Elocution	1	1		
Religion	2	2	2	2
Electives (see below)				

1. Value of Periods: Latin, 60 minutes; Religion, 30 minutes; all other branches, 50 minutes.

2. Electives: In Freshman and Sophomore years a choice must be made between Mathematics or History. Eight hours a week in the Junior and eleven hours a week in the Senior year must be devoted to electives. These include, besides the branches marked with an "E" in the list above, the following: German, French, Political Economy, Pedagogy, Astronomy, Geology, Biology, Chemistry, Public Speaking, Descriptive Geometry, etc.

Conferring of Degrees

June, 1914

A. M.

J. Frederick Reeve, A. B.
J. Edward Twomey, A. B.
Eugene F. O'Riordan, A. B.

A. B.

John P. Burke
William G. Dooley
Thomas C. Clennon
Leo F. Foley
J. Aaron Colnon
Robert J. Garland

B. S.

Emanuel Apostolides
Frank M. Horstman, M. D.
Joseph M. Knochel
Llewellyn C. Merrill
John V. Stevens, M. D.

CLASS HONORS.

SENIOR CLASS.

THE ALUMNI MEDAL FOR THE HIGHEST HONORS OF THE CLASS OF 1913 WAS MERITED BY

J. AARON COLNON

JUNIOR CLASS.

THE JOHN B. MURPHY MEDAL OF EXCELLENCE WAS MERITED BY

EDWARD AMBERG, 95

SECOND HONORS.

Francis S. Warzynski, 88
Earl D. King, 87
James E. Kehoe, 86
Lambert K. Hayes, 86
Edward E. Caverley, 86

SOPHOMORE CLASS.

THE HON. JOHN GIBBONS MEDAL OF EXCELLENCE WAS MERITED BY

ERNEST W. THIELE, 96

FIRST HONORS.

John G. Peterson, 93
Peter E. Nolan, 92

SECOND HONORS.

James P. Molloy, 89
Daniel F. Cunningham, 88.8
Leo. E. McGivena, 86
Clarence F. Murphy, 88
Peter P. Witmanski, 85
Stanislaus G. Rudziewicz, 85
James J. Larkin, 85
John J. Fitzgerald, 85
Edward D. Reynolds, 85

FRESHMAN CLASS.

THE HON. RICHARD W. CLIFFORD MEDAL OF EXCELLENCE WAS MERITED BY

IGNATIUS P. WALSH, 96

FIRST HONORS.

Walter T. Quigley, 91 James T. Mangan, 90

SECOND HONORS.

Stephen A. Rutkowski, 88 Francis T. Sujak, 87
Francis J. Maresh, 87 J. Harlan Richards, 85
Jerome Jacobsen, 85

SPECIAL PRIZES.

THE HON. CARTER H. HARRISON ORATORICAL MEDAL WAS WON BY

LAMBERT K. HAYES

THE DUMBACH CHEMISTRY MEDAL WAS WON BY

ERNEST W. THIELE

Students of College Department

Amberg, Edward J.	Senior
Bouvais, Ernest A.	Sophomore
Beckmann, William E.	Freshman
Byrnes, Joseph W.	Senior
Byrnes, W. Jerome	Freshman
Caverley, Edward E.	Senior
Clarke, Michael A.	Freshman
Colnon, Edward L.	Freshman
Conron, Francis J.	Freshman
Corbett, T. Cyril	Freshman
Cribben, Mark J.	Freshman
Cunningham, Daniel F.	Junior
Crotty, John W.	Sophomore
Cunningham, Vincent W.	Freshman
Demski, Stanislaus J.	Freshman
Duffy, Edward J.	Sophomore
Dunne, Edward W.	Sophomore
Finnegan, William A.	Freshman
Fitzgerald, John J.	Junior
Flanagan, John J.	Freshman
Flavin, Raymond D.	Freshman
Hagedorn, William P.	Freshman
Hanrahan, James R.	Sophomore
Harks, Walter M	Freshman
Hayes, Lambert K.	Senior
Heinzen, Joseph H.	Freshman
Ignatz, Francis J.*	Freshman
Jacobsen, Jerome	Sophomore
Janicki, Stanley F.*	Freshman
Jankowski, Justin J.*	Freshman
Kehoe, James E.	Senior
Kerwin, Joseph	Junior
Kilgore, George J.	Freshman
King, Earl D.	Senior
Krajewski, Francis J.	Freshman
Kruse, Theodore J.	Freshman
Larkin, James J.	Junior
Lischka, Charles N.*	Junior
Lundy, Raymond E.	Freshman
McConnell, George L.	Freshman

McGivena, Leo E. ..... Junior
Maher, James ..... Junior
Mangan, James T. ..... Sophomore
Maresh, Francis J. ..... Sophomore
Mazur, Alexander* ..... Junior
Modrzenski, Francis* ..... Freshman
Molloy, Edward P. ..... Sophomore
Molloy, James P. ..... Junior
Murphy, Clarence F. ..... Junior
Murphy, J. Sherwin ..... Freshman
Muszynski, Walter V. ..... Sophomore
Nolan, Peter E. ..... Junior
O'Connor, John T. ..... Freshman
O'Neill, Emmet J.* ..... Freshman
Pechous, Charles E. ..... Freshman
Peterson, John G. ..... Junior
Plucinski, Stanislaus* ..... Freshman
Pollard, John J. ..... Freshman
Probst, Stanley J. ..... Freshman
Quigley, Walter T. ..... Sophomore
Reynolds, Edward D. ..... Junior
Richards, Harlan J. ..... Sophomore
Rudziewicz, Stanislaus G. ..... Junior
Rutkowski, Stephen A. ..... Sophomore
Ryan, John V. ..... Freshman
Ryan, Marcus C. ..... Freshman
Ryan, William H. ..... Sophomore
Schultz, John F.* ..... Freshman
Shortall, Joseph C.* ..... Junior
Sims, Murray W. ..... Freshman
Sujak, Francis T. ..... Sophomore
Thiele, Ernest W. ..... Junior
Walsh, Ignatius P. ..... Sophomore
Walsh, Sinon J. ..... Freshman
Walsh, Thomas G. ..... Freshman
Warzynski, Francis S. ..... Senior
Wcislo, Adam ..... Freshman
Weisenburger, Arnold V. ..... Freshman
Witmanski, Peter P. ..... Junior
Witmanski, Stephen I.* ..... Freshman
Zahringer, Eugene V. ..... Freshman

*Special.

Loyola University

Department of
Law

1915

Ashland Block, Clark and Randolph Streets.
Address: The Dean or Secretary
Phone Central 1671

THE
LOYOLA UNIVERSITY PRESS
1915

Faculty of the Law Department

Rev. JOHN L. MATHERY, S. J.,
President of the University.

Rev. PATRICK A. MULLENS, S. J.,
Regent of the Law Department.

Hon. WILLIAM DILLON, LL. D.,
Dean of the Law Faculty.

ARNOLD D. McMAHON, A.M., LL. B.,
Secretary of the Law Faculty.
The Law of Wills and Administration.
The Law of Property, A.

Michael J. Ahern, A. M., LL. B.,
Common Law Pleading.

Bernard J. Baumer, A. B., LL. B.,
The Law of Property, B—Abstracts and Conveyancing.

Joseph B. David, Esq.,
The Law of Crimes and Criminal Procedure.

J. Ambrose Gearon, A. B., LL. B.,
The Law of Agency.

Hon. Michael F. Girten, LL. B.,
The Law of Persons and Domestic Relations.

Joseph A. Graber, A. M., LL. B.,
The Law of Suretyship.—Partnership.

Charles M. Haft, LL. B.,
The Law of Public Corporations.

James Hartnett, Esq.,
Lecturer on Constitutional and Elementary Law.

HON. JOHN P. McGOORTY. LL. B.,
Lecturer on the Law of Torts.

WILLIAM C. McKENNA, A. M., LL. B.,
The Law of Private Corporations.

GEORGE V. McINTYRE, LL. B.,
The Law of Evidence—Equity Jurisprudence.

GEORGE F. MULLIGAN, A. M., LL. B.,
Practice and Procedure.

REV. PATRICK A. MULLENS, S. J.,
Lecturer on Legal and Social Ethics.

JAMES R. QUINN, A. M., LL. B.,
The Law of Bailments.

PATRICK H. O'DONNELL, LL. D.,
Law of Negotiable Instruments.

REV. FREDERIC SIEDENBURG, S. J.,
Lecturer on Sociology.

HON. JOHN J. SULLIVAN, LL. B.,
Elementary Law.

JOSEPH J. THOMPSON, LL. B.,
Law of Insurance.
Sales of Personalty.

PAYTON J. TUOHY, A. M., LL. B.,
The Law of Contracts.

ELIJAH N. ZOLINE, A. B., LL. B.,
Lecturer on Equity Jurisprudence and Practice.

FOUNDATION.

The Law Department of Loyola University was established in September, 1908. From the beginning its success has been pronounced, and it now stands among the leading night law schools of the country. It occupies a commodious and quiet suite in the Ashland Block, Clark and Randolph Streets, in the center of Chicago's business district. The regular session for the year 1915-16 will open on September 13, 1915, at 6:30 p. m.

ADVANTAGES.

Class sessions of the Department are held in the evening from 6:30 to 9:00 o'clock, thus making it possible for young men employed in law offices to unite the advantages of a regular, scientific course in the law under experienced instructors with the practical training afforded by their daily work. This arrangement also enables those engaged in clerical and commercial positions to give their attention to their duties and at the same time prepare themselves for the practice of the profession.

The location of the Department in Chicago, the commercial and financial center of the West, presents opportunities which are unequaled elsewhere to those who must support themselves whilst pursuing their legal studies. The officers of the Department make every effort to aid its students to secure desirable employment when seasonable application for such assistance is made. Many requests for clerks are received from the leading law firms of Chicago, and the Secretary is frequently able to place students desiring such positions.

Chicago also affords innumerable advantages for the study of law in all its branches: Varied and important litigation is here being constantly carried on. Sessions of the Courts of Cook County, the Municipal Court of Chicago, and the Federal Courts are held daily thus affording to those who have leisure to attend ample opportunity of learning the trial methods of the leading lawyers at the Bar of Illinois. The library facilities of Chicago, open to students in the professions, are unsurpassed, and in addition, the Department has a library suitable for study and research at the disposal of its students.

The Department enjoys, moreover, the distinction of being the only evening law school in Chicago maintained and supported by a University. Worthy young men, whose circumstances do not permit them to give the entire day to the study of law, may here secure their professional training and receive their law degrees from a University of recognized standing.

Students in the Law Department are admitted to the musical and literary societies, to the gymnasium and athletic clubs of the University, and to the columns of its Journal on the same basis as students in the other Departments. Thus there is fostered among the law students a spirit productive of pride in their work, and an incentive is given to better and more sustained effort. This bond of intellectual fellowship will present ideals of high achievement utterly absent in an unaffiliated law school.

AIM—METHOD OF INSTRUCTION.

The aim of the Department is to give its students a thorough training, both theoretical and practical, in all branches of the law. The course of studies is so arranged as to impart that knowledge of the law which is indispensable to students in whatever jurisdiction they may intend to practice.

The fact that the class sessions are held in the evening has enabled the Department to secure the teaching services of active practitioners at the Chicago Bar. Hence, the law faculty is not committed to the exclusive use of any particular system of legal instruction; the professors have been chosen because of success in their special field, and it is not deemed wise to restrict them to any particular method of imparting the knowledge they have acquired from their study and experience. All of the professors have, however, adopted a system of instruction based on the principles of the **Ratio Studiorum.** Matter, whether text or adjudicated cases, assigned for home study is first gone over in lecture by the professor, who explains what is obscure or difficult and illustrates by practical examples the principles involved.

The student then studies the assigned matter and at the next class session is prepared for the recitation, which is an exhaustive quiz, sometimes by way of question and answer and often by the oral solution of hypothetical problems involving the principles explained and studied. The student, under this system, has ample

opportunity of learning thoroughly the law on each topic: First, from the **praelectio,** or explanation of the professor; secondly, from his own careful home study; and, lastly, from the recitation or class discussion.

REQUIREMENTS FOR ADMISSION.

Regular Students.—Applicants for admission to the Department must be not less than eighteen years of age, and must present proof of the successful completion of a four year high school course in a school of recognized standing. Graduates or students of private institutions with credits equivalent to those of high school graduates, will be admitted as regular students on proof of such credits.

At the time of matriculation, students must present proof of their preliminary education either by way of diploma or certificate, from the principal or director of the school from which they come. In no case will a student be admitted to the department who has not successfully pursued a four year high school course, or work equivalent thereto.

Advanced Standing.—Students who have successfully prosecuted a portion of their law course in a law school with equivalent courses and requirements may be admitted to the second or third year classes of the Department upon proof of such prior study.

FEES AND EXPENSES.

Matriculation.—In all cases a matriculation of Five Dollars is charged when a student is first registered. The fee is paid but once and is not returnable.

Tuition.—The tuition fee for regular students is Seventy-Five Dollars, payable quarterly in advance. A discount of Five Dollars will be allowed to students who pay the year's tuition in advance before October 1st.

Graduation.—Upon graduation of students a diploma fee of Ten Dollars will be charged.

Those desiring to take only certain courses will make arrangements with the Secretary of the Department; charges in such cases will be based on hours of classroom work.

DEGREES.

Upon successful completion of the entire regular course, as outlined, students are entitled to receive the degree of Bachelor of Laws, but before the degree is conferred each student is required to pass a satisfactory written examination embracing the whole field of the law. In preparation for this examination a review course is given in the third year class, one evening each week for the entire year. The papers in this general examination are marked by the Executive Board of the Department.

Under no circumstances will a degree in law be conferred upon a student who has not completed one entire year of work in the Department.

The Degree of Bachelor of Laws was conferred upon the following Students on June 22nd, 1914

Alfred C. Bosser
James G. Brophy
Howard A. Brundage
Daniel W. Dever
John Foster
Charles A. Gardiner
James M. Gleason
John J. Gorman
Walter C. Healy
Ambrose M. Hayes, A. B.
T. J. MaGinnis, A. M.
T. B. McGrath
George V. O'Connell, A. B.
Edward J. O'Hara
Will J. Perkinson
Jesse Phillips
Leo E. Pryor
Thomas J. Reedy, A. M.
Edward T. Jurkowski

CLASS SESSIONS—COURSE OF STUDIES.

The regular course covers a period of three years, divided into a First, Second and Third year.

Class sessions are held on Monday, Tuesday, Wednesday and Thursday evenings from 6:30 to 9:00. Regular and punctual attendance on the part of the students and also daily preparation for class recitations are prerequisites, and delinquency in either particular will be deemed sufficient cause for cancellation of the delinquent's registration.

The quarterly system has been chosen as best adapted to the requirements of an evening law school. Each course, upon its completion, is made the subject of a searching written examination. This promotes more careful study and admits of thorough examination with less tax upon the student's endurance than a general test at the close of each year. An average of 70 per cent must be attained upon the written examination in each subject for students to continue with their classes. Those who fail to attain 70 per cent in any topic may, in the discretion of their professor, be given a second examination, but no student who fails to attain such average in two topics will be allowed such re-examination.

The following schedule shows the required law courses arranged according to years:

FIRST YEAR.

I. Elementary Law.—5 hours per week for 12 weeks.

A course on the elements of English and American law, its sources, development, scope and classification, designed to give students a general view of the law. Courts, their organizations and functions. Reporting of judicial decisions. Introductory work on use of law library.

Text: Robinson's Elementary Law.

II. The Law of Contracts.—5 hours per week for 12 weeks.

Nature of the consensual obligation—Classifications of contracts—Formation of simple contracts; offer and acceptance; agreement as affected by mistake, misrepresentation, fraud, duress and undue influence; Consideration, its historical development and modern aspect; Capacity to contract, contracts of minors; The statute of frauds, contracts within and the satisfaction of the statute; Illegal contracts, at common law, and under modern statutes—Conditions in contracts; precedent, either express or implied and rules governing same, conditions subsequent, waiver of conditions. Formal obligations and their execution—Quasi-contractual obligations—The construction and interpretation of contracts—Operation of contracts, assignment, promises for the benefit of a third person—Discharge of

contracts; By agreement, novation, and release; By operation of law, impossibility of performance, the general rule and exceptions, merger, bankruptcy, material alteration of instrument; By performance, tender; By breach; Accord and satisfaction—Parties to and measure of damages in actions on contracts.

Texts: Instructor's printed syllabus,
Huffcut and Woodruff's Cases on Contracts.

III. The Law of Torts.—5 hours per week for 12 weeks.

The law of Civil Wrongs, historical development and modern theory—Tort distinguished from crime, from breach of contract—Option to sue in Contract or Tort—Damnum absque Injuria—Injuria sine damno—Specific Torts, and defense to actions therefor: false imprisonment, malicious prosecution, abuse of process, assault and battery, criminal conversation, seduction, unlawful interference with contract, libel and slander, trespass to property, deceit, slander of title, unfair competition, nuisance, negligence, Tort Remedies—Workmen's Compensation laws—Parties to Tort actions; pleadings, evidence and measure of damages in actions for. Injunction as a tort remedy.

Text: Burdick on Torts.

IV. The Law of Crimes and Criminal Procedure.—5 hours per week for 10 weeks.

Crime defined—The Criminal Act, Intent as an element of Crime, intent in statutory offenses—Criminal Capacity—Justification for crime—Classifications—Criminal Jurisdiction, Extradition—Criminal procedure; Arrest, Examination, Commitment, Accusation by way of complaint, information and indictment; Arraignment and plea; Trial and herein of evidence in criminal cases; Verdict; Proceedings after verdict; Sentence; Writ of error. The writ of habeas corpus.

Constitutional rights of persons accused of crime—Specific criminal offenses: against the Government, against public peace, health and economy, against morality and decency, against the person, against a dwelling house, against property, maritime offenses.

Text: May on Criminal Law.

V. The Law of Property, A.—2½ hours per week for 10 weeks.

Property in general, classifications. Distinctions between real and personal property. Fixtures, emblements, burial lots, church pews. Subject matter of personal property. Title to personalty and methods of acquiring same—Original acquisition; capture, seizure, finding of lost and reclaiming of abandoned goods, treasure trove, reclamation of wild animals, accession natural and artificial, patents, copyrights, trade-marks, literary property. Act of Law: forfeiture, corporate succession, judgment, insolvency and bankruptcy, intestacy. Transfer by parties; by contract embracing sale, assignment, endorsement, bailment, etc.; by gift, inter vivos, causa mortis; by will or testament. Joint interests in personalty, classification, incidents. Suits to recover personalty, pleadings, evidence and measure of damages in actions for trespass to personalty.

Subject matter of real property, lands, tenements, hereditaments. The feudal system of tenures. Interests in realty according to quantity;

freeholds of inheritance, life estates, definitions and incidents. Interests in realty according to quality, absolute and conditional estates. Interests according to time of enjoyment, estates in praesenti, in futuro. Joint interests, definitions and incidents.

Text: Instructor's Typewritten notes.
Selected American cases.

VI. The Law of Principal and Agent.—2½ hours per week for 15 weeks.

The doctrine of representation—The relation of Principal and Agent distinguished from that of Master and Servant—Creation of Agency, by appointment, by ratification, by estoppel—What acts may be done through agent—Capacity of parties, joint principals and agents—Termination of agency, by agreement, by operation of law, by revocation and renunciation.—Irrevocable agencies—Construction of Agents' authority, powers incidental and implied—Rights and liabilities between principal and third persons—Admission by agent general rule as to when competent to bind principal and when incompetent—Notice to agent, when imputed to principal. Exceptions to rule imputing knowledge to principal—Rights and Liabilities between agent and third persons—The case of Public Agents—Rights and Liabilities between principal and agents—Duties of agent to Principal—Duties of principal to agent—Sub-agents, general rules as to delegation of authority, when authority to delegate will be implied—Relation of sub-agent to principal in such case, rights of sub-agents as to remuneration, reimbursement and indemnity.

Text: Huffcut on Agency.

VII. The Sale of Goods.—2½ hours per week for 6 weeks.

Contract of sale, distinguished from other transactions; subject matter of contract, future goods, goods which have perished; the consideration, ascertainment of price, agreement to sell at valuation. Conditions and warranties defined; implied warranty of title; Caveat Emptor; implied warranty of quality in sales of goods ordered for a particular purpose known to vendor, of goods ordered by description, of articles of food, by sample, by manufacturer. Effects of the contract, when title passes, illustrations. Performance of the contract. Unpaid vendor's lien, Stoppage in transitu, re-sale. Actions for breach of the contract, remedies of the seller, remedies of buyer, measure of damages. The Statute of Frauds, contracts of sale within and satisfaction of the Statute.

Text: Benjamin's Principles of Sales.

VIII. The Law of Bailments and Carriers.—2½ hours per week for 14 weeks.

Definition. Principles common to all contracts of bailment. Roman classification, modern classification. Rights and liabilities of parties in bailments for sole benefit of bailor; in bailments for sole benefit of bailee; in mutual benefit bailments. Termination of bailments. Innkeepers, rights and liabilities as to guests, their person, their property; modern statutes affecting innkeepers' liability. Lien of innkeepers.

Common carriers of goods, their extraordinary liability; contracts limiting liability; Carriers of live stock, of baggage; Termination of ex-

traordinary liability. Lien. Common Carriers of passengers, who are; rights and liabilities of. Actions against carriers of goods, or persons; Parties, pleadings, evidence and measure of damages.

Text: Elliott on Bailments.

IX. The Law of Persons and Domestic Relations.—2½ hours per week for 15 weeks.

Domestic relations defined and enumerated.—Husband and wife, the nature of marriage as a contract, as a status. Impediments to marriage, consent in the contract as affected by duress, fraud and mistake. Breach of contract to marry, action for and measure of damages in. The solemnization of marriage at common law, modern statutory provisions. The legal consequences of marriage, mutual duties and rights of husband and wife. The property rights of husband and wife, development of the law. Rights of surviving husband or wife in property of deceased spouse. Disabilities of coverture, modern statutory enactments. Transactions between husband and wife. Rights of action in husband or wife against third persons, for wrongs against the relation, for other wrongs. Liability of husband for necessaries furnished wife. Dissolution of marriage, actions for divorce and separate maintenance, procedure in, and defenses to such actions.

Parent and child, legitimacy and illegitimacy. Duties and liabilities of parents: Maintenance, liability for necessaries furnished by third person; Protection; Education. Liability of parent for torts of child. Rights of parents: Custody and control; Services, emancipation; Right to recover for injuries to child, loss of service in general. Transactions between parent and child.

Guardian and Ward. Kinds of guardianship. Jurisdiction in matters of guardianship. Appointment and qualification of guardians. Powers and duties of guardians in general, as to ward's person, as to ward's estate. Transactions between guardian and ward. Accounting by guardian. Persons under special disability. Infants. Aliens. Insane persons. Spendthrifts.

Text: Long on Domestic Relations.

SECOND YEAR

X. The Law of Property, B.—2½ hours per week for 30 weeks.

The latter half of course A reviewed and amplified. The partition of joint estates. Mortgages, the common law and equitable theory, rights and liabilities of mortgagors and mortgagees, remedies and remedial rights incident to mortgages. Reversions. Remainders, estates within the rule in Shelly's case. Uses and trusts, the statute of uses, future uses. Executory devises, doctrine of perpetuity, rules against accumulation. Powers, their nature, creation and execution. Incorporeal hereditaments, rights of common, easements, franchises, rents. Licenses. Title to realty, nature and sources of. Descent, common law and modern statutory rules. Accretion, alluvion and avulsion. Adverse possession. Estoppel. Public and private grants. Common law conveyances, conveyances under statute of uses, modern statutory deeds. Deeds, their requisites and component parts.

Covenants in deeds; express, implied, covenants running with the land. Involuntary alienation, eminent domain, tax titles. Title by devise, the history and development of the law of wills.

Text: Tiedeman on Real Property.

XI. Abstracts and Conveyancing.—10 hours.

Lecture and Practice Course. The survey of public lands, ranges, meridians, townships, sections, subdivisions. The recording system in general, indicii of grantors and grantees. The tract index, the record. The preparation of the abstract, what it should contain, judgment searches. Examination of specially prepared abstract. The merchantability of an abstract. Practical exercises in preparation of contracts to sell real estate, statutory forms of deeds, warranty and quit-claim, trust deeds, etc. The Torrens system of registering titles.

XII. The Law of Evidence.—2½ hours per week for 20 weeks.

General character of American law of evidence. Questions of law and questions of fact, functions of the court and jury. The rules governing the production of evidence. Burden of proof, prima facie case. Presumptions of law, conclusive and disputable; presumptions of fact. Admissions, confessions. Leading principles of exclusion; character evidence, rule in civil and criminal cases, how proved when material; opinion evidence, matters forming subject of expert opinion; hearsay evidence, exception to rule against hearsay. Real evidence. Writings, best evidence rule; foundation for production of secondary evidence. Witnesses, qualifications of witnesses, privileged persons and communications, refreshing memory. Examination of witnesses, in chief, cross examination. Impeachment of witnesses.

Text: Hughes on Evidence.

XIII. Common Law Pleading.—2½ hours per week for 20 weeks.

History and classification of Actions: real, personal and mixed. The forms of action, their definition, division and application. Statutory actions.

Parties to actions—in general—in actions ex contractu—in actions ex delicto—misjoinder and nonjoinder.

The successive steps in a common law action. The order of pleadings. The declaration—what allegations it must contain to suit the form of action brought. The demurrer—divisions, purpose and use. The dilatory pleas—to the jurisdiction—in suspension—in abatement—their nature and purpose. Pleas in bar—The common traverse—pleas by way of confession and avoidance. Estoppel—new assignment—pleas puis darrein continuance—Repleader—Proceedings after verdict—after judgment. The rules of pleading—to effect unity—certainty—consistency and simplicity—directness and brevity—Miscellaneous rules. Extraordinary legal remedies, their history, nature and object—Mandamus—Certiorari—Quo Warranto—Prohibition—Habeas Corpus—Scire facias.

Text: Andrew Stephen's Common Law Pleading.

XIV. Equity Jurisprudence.—2½ hours per week for 22 weeks.

History and development of equity. The maxims of Equity. Its three great divisions. Equitable Titles—Trusts, their origin and history, Statute

of uses, classification of trusts; Express trusts, their creation and essentials, doctrine of trusts by precatory words; implied trusts, resulting and constructive; trusts for married women, wife's equity to a settlement; charitable trusts, their origin and characteristics, the cy-pres doctrine, rules against perpetuities and accumulations as applied to charitable trusts; Trustees, their powers and duties, jurisdiction of equity over trustees. Mortgages, the equitable theory of a mortgage, nature of the equity of redemption, foreclosure suits, rights and duties of mortgagors and mortgagees. Assignments, common law rule forbidding assignments of choses in action, equitable doctrine, rights of action of the assignee at law and in equity.

Equitable Rights: Accident defined, basis upon which relief is afforded in equity, cases in which equity relieves, lost instruments, penalties, forfeitures, defective execution of powers. Mistake defined, mistake of law, requirements precedent to relief on mistake of fact. Fraud, general nature of equitable jurisdiction in cases of fraud, Concurrent jurisdiction, distinction between relief at law and in equity, Exclusive jurisdiction; Lord Hardwicke's division of fraud, actual fraud, fraud arising from intrinsic nature of the transaction, fraud presumed from the circumstances, relations of the parties, fraud affecting third persons not parties to the agreement. Equitable doctrine of notice, its application and limitations, actual and constructive notice, lis pendens. Equitable estoppel, basis of doctrine, applications. Election, doctrine defined, circumstances under which it arises, consequences of election, applications of doctrine. Conversion and reconversion, general nature and extent of the equitable doctrine, illustrations. Adjustment, set-off, contribution, exoneration, subrogation, marshalling of assets. Equitable liens, distinctions between liens at law and in equity, instances of equitable liens.

Equitable remedies; Specific performances; Injunctions, to restrain infringement of equitable rights, to restrain proceedings at law, bills of peace and interpleader, injunctions to protect purely legal rights. Reformation, re-execution, rescission and cancellation of instruments, general principles of equitable relief, instances. Account. Partition. Bills to assign dower. Bills to establish boundaries. Partnership bills, reasons for resort to equity, accounting, dissolution, suits between firms having a common member. Creditor's bills, against debtor during lifetime, administration suits. Protection afforded estates of infants, idiots and lunatics in equity, modern American statutes. Bills for discovery, and to take testimony de bene esse, grounds of equitable jurisdiction, changes effected by modern statutes. Bills quia timet. General nature of equitable jurisdiction to appoint receivers, illustrations, powers and duties of a receiver. The writ of ne exeat.

Text: Bispham's Principles of Equity.

XV. Wills and the Administration of Decedent's Estate.—2½ hours per week for 16 weeks.

History of the law of wills and testaments; Legislative control of testamentary disposition of property, the law by which such disposition is governed. Wills distinguished from deeds, from contracts; The essential characteristics of a will, animus testandi, revocability. Statutory require-

ments in general and their satisfaction, nuncupative wills. Who may make a will, capacity as affected by mistake, fraud, duress, and undue influence. What can be disposed of by will. Who can take under a will, statutes of mortmain, modern law. Revocation of wills: by specific act manifest on face of will; by a later will, distinction between will and codicil; by act of the law. Alteration of wills, republication. Probate of Will and the contest thereof. Construction of wills. Lapsed, void and adeemed legacies. Classes of legacies, abatement of legacies, order of abatement. Satisfaction of legacies. Renunciation by widows and election to take under statute.

Practical administration of decedent's estate: testate decedent, petition for probate and letters testamentary, the hearing, proof in solemn form, executor's bond, issuance of letters testamentary; intestate decedent, application for letters of administration, who is entitled to administer, bond of administrator, issuance of letters. Procedure subsequent to issuance of letters testamentary and of administration; Taking possession of decedent's personal property, citation to compel delivery of assets. Inventory of property, including legal description of real estate. Appraisement of personal assets, allowance of widow's and child's award, widow's selection; Publishing for claims, adjudication term, order of adjudication, procedure in case of claims filed after adjudication term, hearing and allowance or refusal of claims, classes of claims. Sale of real estate on insufficiency of personal assets to pay claims, procedure and decree. Final account, notice, objections, hearings; Final order.

Text: Rood on Wills.
Instructor's Typewritten Notes.

XVI. The Law of Partnership.—2½ hours per week for 12 weeks.

Definitions and distinctions. Purposes for which a partnership may be created. Who may be partners. The contract of partnership and the evidence thereof. The tests of partnership, between parties themselves, as to third persons. Incidents of partnership, articles of agreement, firm name, good will, the firm capital, property of the firm. Rights and duties of partners toward each other. Actions between partners, at law, in equity. The powers of partners, as between themselves, as between firm and third persons. Liability of partners for acts of co-partner, in contract, in tort. Liability of co-partnership for acts of agents and servants. Nature and extent of the liability of partners. Actions by and against the firm. Termination of partnership. Dissolution, Notice, effect of upon powers of partners. Application of partnership assets. Final accounting. Limited partnerships.

Text: Mechem's Elements of Partnership.

XVII. The Law of Suretyship.—2½ hours per week for 18 weeks.

Suretyship in general, definitions and distinctions. Real suretyship. Consideration for the suretyship contract. Incapacity of parties as affecting the contract. Offer of guaranty, its acceptance and nature thereof. Principal or surety competent but not bound: conditional execution and unauthorized delivery; fraud, duress, illegality and other matters affecting assent and execution. Legal requirements as to form of contract, statute of frauds. Construction and interpretation of the contract. General

and special, continuing and non-continuing, limited and unlimited guaranties. Negotiability and assignabilty of contracts of suretyship and guaranty.

Surety's right to re-imbursement or indemnity. The right of subrogation. Contribution between co-sureties, defenses to actions for. Subrogation as to co-sureties. Surety's right to send creditor against the principal or to compel principal to exonerate him. When demand on principal and notice of default is necessary to charge surety or guarantor. Payment and satisfaction or tender by principal as discharge of surety. Discharge by operation of law. Alteration of principal's contract or surety's risk without consent of surety. Release of surety by extension of time to principal. Loss or surrender of securities by the creditor. Official bonds. Bonds in the course of judicial proceedings.

Text: Spencer on Suretyship.

XVIII. The Law of Negotiable Instruments.—2½ hours per week for 10 weeks.

General characteristics of negotiable instruments, the law merchant. Form and interpretation of negotiable instruments. Consideration of negotiable instruments, as it affects bona fide ownership. Negotiation, classes of indorsement, the indorser's undertaking. Rights of holders, what constitutes a holder in due course. Liability of parties, those primarily liable, those secondarily liable. Presentment for payment, time and place, waiver. Notice of dishonor, form of notice, to whom and how given, waiver. Discharge of negotiable instruments.

Bills of Exchange, their form and interpretation. Acceptance of bills, presentment for acceptance, protest, acceptance supra protest. Payment for honor, rights of payor.

Promissory notes and checks, defined, presentment of checks, effect of certification. Actions on negotiable instruments.

Text: Bunker on Negotiable Instruments.

THIRD YEAR

XIX. Practice and Procedure.—2½ hours per week for 18 weeks.

Commencement of actions, ordinary suits at law; actions in attachment, replevin, garnishment, and forcible entry and detainer. Bail in civil cases. Security for costs, suits in forma pauperis. Preparation of brief on the facts, on the law.

Appearance of defendant, the practice in default cases, setting aside defaults.

The pleadings: Declaration, practice in drawing in leading common law actions. Plea, what may be shown under the general issue in each action, what must be specially pleaded. Demurrers, general and special, disposition of.

Amendments. Motions of course, contested motions. Putting case at issue. Trial: Examination of jurors, challenges. Opening statement. Production of evidence, prima facie case in each form of action. Motion to direct verdict. Evidence in defense, rebuttal. Closing arguments. In-

structions to jury. Verdicts, general and special. Proceedings after verdict and before judgment. Judgment, appeal, writ of error. Judgments by confession. Practice in entering, and proceedings to vacate.

The case in the appellate tribunal, practice. Abstract of record, brief, oral argument. The decision of the higher court, proceedings on affirmance, on reversal.

Removal of causes from State to Federal Courts. Practice and Procedure in Federal Courts. Appellate practice. Removing case from State Supreme Court to Supreme Court of the United States.

Texts: Instructor's Notes; Smith's Court to Court.

XX. Equity Pleading and Practice.—2½ hours per week for 20 weeks.

Nature of equity and common law jurisdiction, stare decisis. Parties to the bill, necessary parties, proper parties. Process, service and return. Appearance. Form and requisites of the bill. Bills not original. Demurrers. Pleas, pure, mixed, negative. Answer, as a defense, as furnishing discovery. Replication. Amendments, supplemental pleadings and interrogatories. Evidence in chancery. Motions of course and motions not of course. The hearing. Decrees and decretal orders, final, interlocutory. Masters in chancery, references, reports, objections, exceptions. Injunctions, Receivers. The review of decrees by courts of appellate jurisdiction. Equity practice in the Federal Courts.

Text: Rush, Equity Pleading and Practice.

XXI. The Law of Insurance.—2½ hours per week for 10 weeks.

History and development of insurance. Nature and requisites of the insurance contract, parties, insurable interest, the consideration. Representations and Warranties. Agents and their powers. Waiver and estoppel. The standard fire policy. Terms of the life policy. Marine insurance. Accident and health insurance. Guaranty, credit and liability insurance.

Text: Thompson on Insurance.

XXII. The Law of Private Corporations.—2½ hours per week for 20 weeks.

Corporations defined and classified. The creation and organization of Corporations, general corporation laws, their requirements and compliance therewith. Promotion of Corporate enterprises. The Corporation as a legal entity, as a citizen. De facto corporations, collateral attack upon, and the doctrine of estoppel. The corporate charter, as a contract, the construction of corporate grants. Powers of a corporation, incidental powers, particular powers. Acts ultra vires, general rule, its basis, Estoppel to assert defense of ultra vires. Corporate liability for torts and crimes, history and growth of the law. Right of corporation to exercise its powers in foreign state, the rules of comity. Power of state over foreign corporations, modern statutes and compliance therewith.

Membership in non-stock corporations, in stock corporations.

Capital and capital stock distinguished.

Shares of stock, classes of stock.

Stock subscription contracts. Rights of holders of stock, to participate in management, to inspect records, to dividends. Transfer of shares.

Corporate meeting and elections. The management of corporations, express and implied powers of officers and agents.

The liability of stockholders. Dissolution of Corporations.

Text: Keener's Cases on Corporations.

XXIII. The Law of Public Corporations.—2½ hours per week for 12 weeks

Nature of municipal corporations; creation, alteration, and dissolution; legislative control in general; administration of government in general; departments, including governmental functions, quasi-governmental functions and commercial functions; powers; acquiring, holding and dealing with property; liability for torts; liability of contracts; remedies of creditors.

Text: Elliott on Municipal Corporations.

XXIV. Constitutional Law.—2½ hours per week for 20 weeks.

The relation of the states to the national government. The establishment and amendment of constitutions. Construction and interpretation of constitutions. The three departments of government, their relation to each other, checks and balances. General jurisdiction of the national government. Due process of law, equal protection of laws, police power, taxation, eminent domain, power to regulate commerce, ex post facto laws, law impairing the obligations of contracts.

Text: Boyd's Cases on Constitutional Law.

XXV. Conflict of Laws.—2½ hours per week for 12 weeks.

Jurisdiction: sources of law and comity; territorial jurisdiction; jurisdiction in rem and in personam. Remedies, rights of action and procedure. Creation of rights: personal rights; rights of property. Inheritance. Obligations ex delicto and ex contractu; Recognition and enforcement of rights; personal relations; property; inheritance; administration of estates; judgments; obligations.

Text: Minor's Conflict of Laws.

XXVI. Legal Ethics.—4 lectures of 2 hours each.

The duty of the lawyer to the courts, attempts to exert influence on courts. The defense and prosecution of persons charged with crime. Representing adverse and conflicting interests. Compensation of attorneys. The lawyer in court, attitude toward court, opposing counsel, and witnesses. Advertising. Stirring up litigation, responsibility for litigation. The lawyer's duty in its last analysis.

Text: Code of Ethics of American Bar Association.

XXVII. Review Course.—2½ hours per week for 14 weeks.
1 hour per week for 24 weeks.

Designed to survey the whole field of the law, it is in a sense the complement of the course on elementary law which initiated the student's work. The leading principles of all branches are thoroughly reviewed, the student's knowledge is tested, and errors and doubts corrected and removed. A great part of the time is necessarily devoted to lecture and discussion by the instructor, but every branch is made the subject

of an exhaustive quiz, chiefly by the submission for oral solution of hypothetical problems involving the principles under discussion. Considerable opportunity is thus afforded for practical work in the analysis of legal problems and in the use of the law library.

Text: Instructor's Typewritten Syllabus.

XXVIII. Practice Court.—2 hours per week for 18 weeks.

Rules of procedure are based on the rules in force in the Circuit Court of Cook County. Statements of actual cases are assigned to the students who are required to institute, prosecute and defend the proper proceedings at law or in equity as the case may be. Occasionally, also, work is assigned in matters of a purely criminal nature. Whilst the members of the Third year class are naturally required to take the leading part in the exercise of the Court, opportunity is afforded all other students, as their progress in the law warrants, to take advantage of the training afforded by the course. At the end of each trial, the presiding judge comments on and criticizes the methods of the students, explaining all points of difficulty presented by the proceedings.

Each student is required before graduation to remove a case from the Practice Court to an Appellate Tribunal; preparing the record, abstract, and briefs substantially as required by the rules of practice in the Appellate Court of Illinois.

Course of Logic, Philosophy and Sociology

This class was organized in October, 1902. It is conducted in connection with the Law Department, meeting Friday evenings from 6:30 to 9 p. m., from September to May, in the Ashland Block.

Its object is to furnish to college graduates, advanced and special students and professional gentlemen, an opportunity to review their philosophy or to make a more thorough and practical study of its fundamental questions, after some experience in practical life will have made them realize their importance. Other gentlemen, though not college graduates nor law students, are admitted to the class if their tastes and previous attainments qualify them to profit by it.

The class exercises consist of lectures and discussions on the chief points of Logic, Psychology, Ethics and Sociology. The subject matter of the past year embraced three courses, Logic, Epistemology and Sociology.

Those who have already attained the degree of A. B. will be eligible to that of A. M., on the conditions of the requisite attendance, the presentation of a paper on a philosophical subject and an examination satisfactory to the Board of Managers of the University.

No Text-book is assigned, but instead a syllabus of the lecture is distributed each evening and a list of standard reference books is supplied.

Students of the Law Department are admitted without additional fee; others are charged a fee of ten dollars, payable in advance for the whole course.

Professors: Rev. Frederic Siedenburg, S. J.
Rev. Patrick A. Mullens, S. J.

The following are outlines of the course:

SOCIOLOGY.

FIRST YEAR.

The Social Problem.—Economic evolution—Liberalism and Socialism. The factors of solution—the individual, the state, the church—Solidarism.

The Labor Question.—Conditions and reforms—relation of employer and employe—wages—strikes—lockouts—boycotts—arbitration and conciliation. Labor Unions and Manufacturers Association—Private reforms—Industrial betterment. Legislative reforms—Minimum wage—Workingmen's Compensation—Labor hours and Sunday rest—Moral and sanitary environment—woman, child and immigrant labor—Compulsory insurance—death—disability—unemployment. Health, housing and transportation. Co-operative Societies—the small factory and handicraft. Vocational education. Religious influences.

SECOND YEAR.

Commercial and Industrial Problems.—Competition—law of demand and supply. Trusts and Monopolies—economic and social advantages and dangers. Moral and legislative restrictions. Railroad evils and government ownership. Interstate Commerce and Federal Control. Currency legislation, profits, rents and interest.

Problems of Government.—National and local—poverty and pauperism and crime. Tuberculosis and occupational diseases. Social and Sex Hygiene. The social evil and white slave traffic. Charity and Philanthropy defectives, dependents and delinquents. Modern methods of investigation, interpretation and treatment.

The Agrarian Problem.—Conditions and objects of reform. Social agencies and agricultural schools. Scientific and monetary government aid. Back-to-the-land movement and Colonization of Immigrants. Preservation of National resources.

The Woman Problem.—The general movement—woman's place in society—her present condition—Suffrage and reform. Woman in industry and domestic service. Higher, Vocational and co-education. Christianity and the exaltation of woman.

LECTURES ON MORAL PHILOSOPHY.

A course in general and special ethics with particular application to legal practice.

Definition; Scope; Object-matter; Relation to other sciences; Postulates.

The human act; Knowledge and free-will; Obstacles to voluntariness of acts; Imputability.

The end and the good; The last end; The real and apparent good; The highest good; The pursuit of happiness.

Moral good and moral evil; The essence of morality—False views: Positivists, Utilitarians, Sensists, Rationalists;—Moral Realism; The determinants of morality.

Law-Requisites for a moral law; The eternal law; The natural law—Its properties; Ultimate basis of obligation—Relation to positive law.

The proximate, subjective form of morality—Moral Conscience—Probabilism.

Moral power and moral obligation—Rights and duties—Basis, connotation, distinction—The so-called rights of animals—Collision of rights.

Duties to God—Religious worship, interior and exterior, private and public.

Duties in respect of self—Extremes of Egoism and Altruism. Personal duties regarding the soul, the body, external goods—Reputation, liberty of action, material possessions. Suicide. Veracity and the obligation of keeping secrets. Duties to others—To respect their rights to health, integrity physical and moral, life, reputation, property. Neglect of these duties of the violation of corresponding rights. Protection against unjust aggression—The moderation of blameless defense.

The rights of ownership: basis, realization, titles. Socialism, Society, conjugal, parental, industrial, civil. Unity and indissolubility of matrimony. Parental right in education. Employer and employee.

Nature and origin of civil society. The social compact. Nature of civil authority, origin; Designation of governing power.

Functions of government, legislative, judicial, executive. The right of the sword—Capital punishment. War.

LEGAL ETHICS.

Qualities of law. Their enactment, application, enforcement. Qualifications of legislators; Justice and expediency primary considerations in passing of laws; Unnecessary multiplication of statutes. Caution against retroactive laws.

The dignity of Judge's office. Requirements. Ordinary function. Doubt, in civil cases, in criminal cases. Self-protection against the attempt to influence or corrupt.

The Lawyer's duty toward the profession—knowledge required; what he owes to the Court, opposing counsel, client. The undertaking of doubtful cases, civil, criminal. Means and method. Fee. A rule of conduct.

Register of Students

THIRD YEAR.

BAHM, J. STANLEY.....Hyde Park High School
BOWE, WILLIAM J.....St. Ignatius Academy
COLGAN, DANIEL J.....St. Ignatius Academy
DONAHOE, LEO L., A. B.....Loyola University
DONIGAN, JAMES K.....St. Ignatius College
DUNLAVY, E. J.....St. Ignatius College
DWAN, JOHN A.....St. Ignatius College
ELWARD, J. F., A. B.....Loyola University
GINNANE, THOMAS J.....St. Patrick's Commercial Academy
GRAHAM, ROBERT E.....St. Ignatius College
GREEN, NORMAN.....Englewood High School
HARKINS, LEO.....St. Ignatius Academy
HAYES, JOHN J., A. B.....Loyola University
HOLDEN, SYLVESTER E.....St. Ignatius College
LEAHY, MAURICE F.....Christian Bros. College, Ireland
LEMMER, JOHN R., A. B.....Loyola University
LYNCH, ROBERT D.....De La Salle Institute
MALLOY, JOHN C.....St. Ignatius College
MEISTER, EDWIN F.....University of Illinois
MCCANN, JAMES, R. S.....Christian Bros. College, Ireland
MCTAGGART, THOMAS.....Arcola High School
MCTAGGART, WILLIAM C.....Arcola High School
REEVE, J. FRED, A. M.....Loyola University
RYAN, LEO A., A. B.....Loyola University
RYAN, THOMAS M.....St. Francis College
SCHAF, AUGUSTINE L.....St. Ignatius Academy
SEBASTIAN, LEO H., A. B.....Loyola University
SULLIVAN, EUGENE T.....St. Patrick's Commercial Academy
SULLIVAN, GEORGE D.....St. James High School
TRAINOR, EMMET.....St. Viator's College
TWOMEY, J. EDWARD, A. B.....Loyola University
ULRICH, ALONZO E.....St. Ignatius Academy
WADE, WALTER A.....St. Ignatius Academy
WARD, MARTIN M.....De La Salle Institute

SECOND YEAR.

BEAM, HARRY P.....St. Ignatius Academy
BURNS, JOHN S.....Niagara University
BYRNE, CHARLES E., A. B.....St. Ignatius College
CARROLL, T. J.....St. Patrick's Com'l Academy
COLEMAN, D. P.....Honesdale, Pa., High School
CONNERS, AMBROSE V.....St. Bede's College
DUFFY, JOHN T.....St. Ignatius Academy
DUNPHY, GERALD J.....St. Patrick's Commercial Academy
ELLIOTT, GLENN J, A. B.....Loyola University
FEATHERSTONE, G. F., JR.....Lewis Institute
FITZPATRICK, J. WARD.....St. Ignatius Academy
GORMAN, ALOYSIUS F.....St. Ignatius College
HARDING, JOHN T.....Carl Schurz High School
HASSELL, PAUL.....Southern Collegiate Institute
HURLEY, F. A.....St. Ignatius College
JOHNSON, SWAN M.....Newaygo, Mich., High School
JUHL, CURT.....Royal College Sonderburg
KILGALLON JAMES J.....St. Patrick's Commercial Academy
KILLGALLON, MICHAEL R.....St. Ignatius Academy
MARTIN, PHILIP J.....Cathedral College
MULDNER, GEORGE F.....Cleveland High School
MCMANUS, JAMES P.....St. Mary's College, Kansas
O'CONNOR, JOHN F.....De Paul Academy
O'DONNELL, RICHARD, A. B.....Loyola University
O'GRADY, FRANCIS B., A. B.....St. Mary's College, Kansas
PHILBIN, J. FAY.....St. Ignatius Academy
QUINLAN, PERRY .....Loyola Academy
QUINN, EDWARD J.....St. Ignatius Academy
REGAN, RICHARD H.....St. Ignatius College
SPIEGEL, ELMER JOHN, A. B.....Loyola University
SMITH, THURBER M., A. B.....St. Mary's College, Kansas
STACK, THOMAS J.....St. Patrick's Commercial Academy
STEFANAK, ANDREW G.....St. Procopius College
TREMKO, MICHAEL.....St. Procopius College
WAUGH, WILLIAM F.....Utah Agricultural College
WELCH, EDWARD M.....University of Chicago

FIRST YEAR.

BERNAUER, CHARLES J.....Kewanee, Wis., High School
BIDWILL, CHARLES W.....Lewis Institute
BEIRO, FERNANDO, JR.....St. Paul's College, Porto Rico
BLANK, PETER.....Commercial High School, Odessa
BROWN, JAMES L.....Oak Park High School
BURKE, WILLIAM D.....Kewaunee High School
BYRNE, JAMES.....St. Ignatius Academy
CAGNEY, J. ALBERT.....Loyola Academy
CLOHESY, W. A., A. B.....Campion College
CONWAY, JAMES.....Cathedral College
CUMMINGS, BERNARD F.....Chicago Kent College of Law
COUGHLIN, JAMES J.....De La Salle Institute
COUGHLIN, JOHN H.....De La Salle Institute
DILLON, SIDNEY R.....St. Viator's College
DOOLEY, WILLIAM G., A. B.....Loyola University
DOWDLE, RAYMOND.....St. Ignatius College
DUNN, T. ELMER, A. B.....Loyola University
FENLON, MARTIN J.....St. Kiernan's College, Ireland
FITZGERALD, JAMES, A. B.....Loyola University
FLANAGAN, JOHN J.....St. Ignatius Academy
FURTH, GEORGE M.....De Paul University
GARLAND, ROBERT J., A. B.....Loyola University
GEBEL, PETER F., JR.....De La Salle Institute
HENRIQUEZ-GIL, A., A. B.....Valparaiso University
GRANT, THOMAS P.....St. Viator's College
HANRAHAN, EDWARD.....St. Ignatius Academy
HEALY, J. PAUL.....Detroit College
KANE, FRANKLIN W.....St. Ignatius College
KOCH, RAYMOND J., B. S.....Armour Institute
LAWLEY, WILLIAM F.....St. Ignatius College
LAWSON, LOWELL A.....St. Viator's College
LAYMAN, P. RAY.....Loyola Academy
LEE, THOMAS F.....Presentation College, Ireland
LYNCH, FRANK.....St. Viator's College
MARKIN, HARRY.....Smoliensk High School, Russia
MARTIN, J. EDWARD, A. B.....St. Ignatius College
MORAZZANI, JOHN IGNATIUS.....St. Paul's College, Porto Rico
MURRAY, EDWARD A.....St. Ignatius College
MCNEALLY, CLAUDE.....Clinton, Iowa, High School
O'BRIEN, ROYALL D.....St. Ignatius Academy

O'Connor, James, Jr.....Loyola Academy
O'Reilly, C. H.....St. Mary's College, Kansas
Rose, H. E., Jr.....Loyola Academy
Sheridan, James G.....St. Joseph's Academy, N. Y.
Walsh, John J.....St. Phillip's High School
Welsh, M. E.....St. Ignatius College
Willey, James.....Camden, Indiana, High School

FOUNDED IN 1868

BENNETT MEDICAL COLLEGE

MEDICAL DEPARTMENT OF LOYOLA UNIVERSITY

FORTY-EIGHTH
ANNUAL ANNOUNCEMENT
1915-1916

COLLEGE CALENDAR 1915-16.

1915

Monday, June 7th.....Summer Term Begins.
Monday, Sept. 6th.....Labor Day; Holiday.
Monday, Sept. 27th.....Entrance and Conditional Examinations Begin.
Monday, Sept. 27th.....Reception and Introductory Addresses, 8 p. m., at College Amphitheatre.
Tuesday, Sept. 28th.....Regular Session Begins.
Tuesday, Oct. 12th.....Columbus Day; Holiday.
Thursday, Nov. 25th.....Thanksgiving Day; Holiday.
Thursday, Dec. 23rd.....Christmas Vacation Begins.

1916

Monday, Jan. 3rd.....College Work resumed.
Monday, Jan. 17th.....Term Examinations Begin.
Tuesday, Feb. 1st.....Second Term Begins.
Friday, Saturday.....Easter Holiday.
Monday, May 15th.....Term Examinations Begin.
Monday, May 29th.....Summer Term Begins.
Monday, June 5th.....Alumni Reunion, 10:00 a. m., College Amphitheatre.
Monday, June 5th.....Annual Commencement, 2 p. m.
Tuesday, July 4th.....Independence Day; Holiday.
Tuesday, Sept. 18th.....Term Examinations Begin.
Monday, Sept. 25th.....Third Term Ends.

BOARD OF TRUSTEES.

Hon. William Hale Thompson
Charles J. Whalen, M. D.
Edgar Mead Reading, M. D.
Nathaniel A. Graves, M. D.
John Dill Robertson, M. D.
Charles P. Caldwell, M. D.
Carey W. Rhodes
William J. Pollock, M. D.
James A. Pugh
James A. Waugh
Dennis S. Sattler
Herman B. Meyers
M. J. Collins
Thomas Rafferty

THE COUNCIL.

The executive body of the Faculty is the Council. The duties of the Council are to maintain discipline, recommend to the Trustees the appointment of members of the Faculty, superintend the curriculum, and otherwise act as an executive committee.

John Louis Mathery, S. J., President.
Maximilian Joseph Herzog, M. D., LL. D., Dean.
Henry Stanislaus Spalding, S. J., Regent.
Edgar Mead Reading, A. M., M. D.
Nathaniel Abraham Graves, A. B., M. D.
John Dill Robertson, B. S., M. D.
Henry Foster Lewis, A. B., M. D.
Jacob Franklin Burkholder, M. D.
Arthur Bennett Rankin, B. A., M. B.
Otto Charles Huber, B. S., M. D.
Frank Marion Horstman, Ph. G., M. D.
Felipp Kreisl, M. D.
Kazimir Ambrose Zurawski, A. B., A. M.
Ulysses Joshua Grim, M. D.
Charles Joseph Whalen, M. A., LL. B., M. D.
Charles Peter Caldwell, M. D.
Charles Albert Wade, M. D.
Leo Steiner, Ph. G., M. D.
Henry Aaron Norden, M. D., Junior Dean and Secretary.

Minnie Leishin, Registrar.
Eleanor Ellsworth Sherwood, Assistant Secretary.
Daisy E. Truby, Supt. of Dispensary.

Receipts for money must be signed by the Bursar, Miss Josephine Leahy.

FACULTY.

JOHN LOUIS MATHERY, S. J., President.

HENRY STANISLAUS SPALDING, S. J., Regent.

Maximilian Joseph Herzog, M. D., LL. D., Dean.....59 E. Madison St.
Professor of Pathology, Bacteriology and Hygiene.

Edgar Mead Reading, A. M., M. D.....6338 Monroe Ave.
Professor of Neurology.

Nathaniel Abraham Graves, A. B., M. D.....2258 W. Walton St.
Professor of Medicine.

John Dill Robertson, B. S., M. D.....32 N. State St.
Professor of Surgery and Clinical Surgery.

Henry Foster Lewis, A. B., M. D.....29 E. Madison St.
Professor of Gynecology and Obstetrics.

John Franklin Burkholder, M. D.....108 N. State St.
Professor of Ophthalmology.

Noble Murray Eberhardt, A. M., M. S., M. D.....7 W. Madison St.
Professor of Physiological Therapeutics.

Arthur Bennett Rankin, B. A., M.B.....1402 W. Monroe St.
Professor of Anatomy and Surgical Anatomy.
Director of Surgical Clinic, Jefferson Park Hospital.

Otto Charles Huber, B. S., M. D.....3361 W. Madison St.
Professor of Chemistry.

Felipp Kreissl, M. D.....6 N. Wabash Ave.
Professor of Genito-Urinary Diseases.

Ulysses Joshua Grim, M. D.....30 N. Michigan Ave.
Professor of Otology and Rhino-Laryngology.

Frank Marion Horstman, Ph. G., M. D.....528 Millard Ave.
Professor of Physiology.

William John Pollock, B. S., M. D.....2100 W. Chicago Ave.
Professor of Medicine.

Charles Joseph Whalen, M. A., LL. B., M. D.....25 E. Washington St.
Professor of Medicine.

Seth Scott Bishop, B. S., M. D., LL. D.....31 N. State St.
Professor of Otology and Rhino-Laryngology.

William Rittenhouse, A. M., M. D.....31 N. State St.
Professor of Obstetrics.

Anton Theodore Harris Holmboe, M. D.....1045 N. Sacramento Ave.
Professor of Orthopedic Surgery.

William Beringer Marcusson, A. M., M. D.....1551 W. Madison St.
Professor of Surgery.

Benjamin Harrison Breakstone, B. S., M. D.....32 N. State St.
Professor of Surgery.

Frank Byrnes, M. D.....29 E. Madison St.
Professor of Surgery.

Hugh Neil MacKechnie, A. B., M. D., C. M., F. T. M. C..7 W. Madison St.
Professor of Surgery.

Charles Albert Wade, M. D.....3218 W. Jackson Boul.
Professor of Pediatrics.

THOMAS S. HOGAN, A. M., LL.B.....815 Ashland Block
Professor of Medical Jurisprudence.

ARTHUR GAMMAGE, LL. B.....835 Ashland Block
Professor of Medical Jurisprudence.

KAZIMIR AMBROSE ZURAWSKI, B. A., M. D.....32 N. State St.
Professor of Dermatology.

ALFRED DE ROULET, M. S., M. D.....15 E. Washington St.
Professor of Gynecology and Curator of the Museum.

LEO STEINER, M. D.....1822 S. Halsted St.
Professor of Materia Medica and Therapeutics.

LESLIE FREDERICK MACDIARMID, M. D.....7 W. Madison St.
Professor of Medicine.

HENRY AARON NORDEN, M. D., Junior Dean and Secretary..29 E. Madison St.
Professor of Medicine (Chest Diseases).

ARTHUR HENRY WEIS, M. D.....5 N. Wabash Ave.
Professor of Medicine (Gastrology).

CYRUS BLAZER MCCLURG, M. D.....1360 Fulton St.
Professor of Anatomy.

ULYSSES GRANT DARLING, M. D.....2852 Washington Boul.
Professor of Psychiatry.

ANTHONY AUGUSTUS O'NEILL, Ph. D., M. D.....4607 Champlain Ave.
Professor of Surgery.

JAMES KELLY, S. J.....Loyola University
Professor of Physics.

EDWARD JOSEPH MORGAN, S. J.....Loyola University
Professor of Chemistry.

GEORGE LOUIS SECORD, M. S., Phar. D.....Loyola University
Professor of Pharmacology.

PHILIP FROEBES, S. J.....Loyola University
Professor of Physics.

WILLIAM ALLEN PORTER, M. D.....7 W. Madison St.
Clinical Professor of Otology and Rhinology.

STUART JOHNSTONE, M. D.....150 N. State St.
Clinical Professor of Gynecology.

CARL WAGNER, M. D.....160 Eugenia St.
Clinical Professor of Ophthalmology.

WILLARD SHERMAN BRACKEN, M. D.....104 S. Michigan Boul.
Clinical Professor of Ophthalmology.

GEORGE DE TARNOWSKY, M. D.....30 N. Michigan Ave.
Clinical Professor of Surgery (Extra-mural).

WILLIAM KASPER SPIECE, M. D.....1360 Fulton St.
Clinical Professor of Otology and Rhinology.

ARTHUR EDWARD LEHNER, M. D.....3001 N. Central Park Ave.
Clinical Professor of Medicine.

CAMILLO VOLINI, M. D.....2929 Washington Boul.
Clinical Professor of Surgery.

CHARLES AUGUSTUS BURKHOLDER, B. S., M. D.....1138 E. 63rd St.
Associate Professor of Ophthalmology.

GEORGE LEONARD APFELBACH, A. B., M. D.....25 E. Washington St.
Associate Professor of Medicine (Physical Diagnosis).

BENJAMIN EDELSTEIN ELLIOT, B. S., M. D.....4617 Calumet Ave.
Associate Professor of Anatomy.
ELMER HOLMES FLINN, M. D.....3168 Ogden Ave.
Assistant Professor of Surgery.
THOMAS DOWNS LAFTRY, M. D.....16 N. Kedzie Ave.
Assistant Professor of Surgery.
CHARLES HENRY SOLOMON, M. D.....1048 N. Ashland Ave.
Assistant Professor of Genito-Urinary Diseases.
RICHARD JAY LAMBERT, M. D., Ph. G.....St. Charles, Ill.
Assistant Professor of Therapeutics.
THOMAS STANLEY CROWE, M. D.....5458 Magnolia Ave.
Assistant Professor of Neurology.
WILLIAM JOSEPH HURLEY, M. D.....6559 S. Halsted St.
Assistant Professor of Surgery.
ARTHUR EDISON GAMMAGE, M. D.....6405 N. Clark St.
Assistant Professor of Surgery.
EUGENE LAURENCE HARTIGAN, Ph. B., S. B., M. D....9154 Commercial Ave.
Assistant Professor of Surgery.
THOMAS ALBERT CARTER, B. S., M. D.....6619 Glenwood Ave.
Assistant Professor of Surgery.
WALTER FRANZ VON ZELINSKI, B. S., M. D.....4709 N. Rockwell St.
Demonstrator of Anatomy.
FRANCES HELEN COOK, M. D.....7631 S. Sangamon St.
Instructor of Gynecology.
JACK RALPH LAVIERI, M. D.....1237 W. Grand Ave.
Instructor of Gynecology.
HARLAN DANIEL SHELDON, M. D.....2856 N. Ridgeway Ave.
Instructor of Gynecology.
GEORGE FRANCIS GATES, M. D.....1131 Bryn Mawr Ave.
Instructor of Gynecology.
MILTON WIESE, M. D.....2111 Clifton Park Ave.
Instructor of Therapeutics.
ALFRED THEOPHILUS DAVIS, M. D.....123 S. Ashland Ave.
Instructor of Therapeutics.
CLEVELAND JAMES SHAMBAUGH, M. D.....6903 S. Halsted St.
Instructor of Medicine.
HARRY NATHAN WEIL, M. D.....1355 N. Western Ave.
Instructor of Medicine.
MAXIMILIAN HERSCHLEDER, M. D.....Waukegan, Wis.
Instructor of Medicine.
ISAAC VALERA FREEDMAN, M. D.....1341 S. Halsted St.
Instructor of Medicine (Pediatrics).
CHARLES ELY COLEMAN, B. S., M. D.....1342 W. Madison St.
Instructor of Genito-Urinary Diseases.
SOL. ROSENBLATT, LL.M., M. D.....25 E. Washington St.
Instructor of Ophthalmology.
HERBERT WEIR GRAY, M. D.....4500 N. Whipple St.
Instructor of Gynecology.
CLEVELAND CHARLES MACLANE, M. D. C.....1360 Fulton St.
Assistant in Pathology.
ROSE VORSANGER, M. D.....2354 Milwaukee Ave.
Assistant in Medicine (Pediatrics).
JACK MOSES, M. D.....603 S. Halsted St.
Clinical Assistant in Surgery.
CHARLES NEWTON GARTIN, M. D.....4537 Calumet Ave.
Clinical Assistant in Surgery.

HISTORY.

Bennett Medical College was chartered by an act of the General Assembly of Illinois in 1868. Over two thousand students have been graduated since that time. The aim of this College has always been to furnish instruction of a practical character, so as to send out well qualified practitioners of medicine. At the same time the necessity of a sound scientific foundation is appreciated and met.

The Illinois Medical College and the Reliance Medical College were absorbed by Bennett in 1910, so that three colleges were united to increase the strength of the one.

In 1910 affiliation with Loyola University was consummated. Thus the influence of a University added greatly to the support and standing of Bennett Medical College.

In 1915 the Bennett Medical College passed under the complete control of the trustees of Loyola University.

The course of instruction leading to the degree of Doctor of Medicine is carefully graded and covers a period of five years of eight months each, consisting of lectures, recitations, conferences and laboratory work, with attendance upon dispensary and hospital clinics. Great care has been exercised in arranging the curriculum for the entire course so that the student may not only be thoroughly qualified in theoretical matters, but that he shall receive the utmost amount of practical training. Each student is given personal attention, will make personal examinations of cases and do personal work in the laboratories, clinics and at the bedside.

The College is located in a district where there is an abundance of clinical material. Cook County Hospital, which averages 2,000 bed patients daily, is but ten minutes' walk from the College while the Jefferson Park Hospital is only a few blocks distant. Students are required to attend clinical instruction in these institutions daily in addition to the clinical work done in the college building. Members of our faculty are on the attending staffs of the Chicago Union, Lake View, Cook County, Deaconess, Jefferson Park, Columbus, St. Joseph's, St. Anthony's, St. Bernard's, St. Elizabeth's, Rhodes Avenue, and other hospitals. Students of the College will attend in small sections clinics at these hospitals.

The College Building

The buildings occupied by the Bennett Medical College were built for medical purposes. They are located in a part of the city easily accessible and within a few blocks of Chicago's great med-

ical center. The rooms are well ventilated, heated, and lighted. There are two amphitheatres, four commodious lecture halls and many clinic rooms. The laboratories occupy two entire floors. There are also library and reading rooms, drug room, also receiving and retiring rooms.

In 1910 an addition to the college proper was erected, making commodious quarters, and for the most part used for additional laboratories, and devoted to the study of Physiology, Anatomy, Chemistry, Pathology, Bacteriology, Histology and Pharmacology.

One large floor is devoted exclusively to the study of modern medical and theoretical chemistry. This science is a very important factor to the medical student and ranks in importance with anatomy and pathology. The chemical laboratories are fitted up with modern work desks and tables, with running water, gas, fume-chambers and all the necessary appliances for teaching inorganic chemistry, qualitative and quantitative analysis, volumetric analysis, as well as the most advanced organic and physiological chemistry; modern medicine demands a very exhaustive study of this science, and the college is prepared to meet that demand.

The laboratories devoted to histology, embryology, pathology, bacteriology, and neurological anatomy occupy another floor, where all the necessary apparatus is installed for teaching these sciences in the most approved manner.

The top floor of the new annex is devoted to the study of anatomy. As all who are versed in the history of medicine know, an intimate first-hand knowledge of the structure of the human body is essential for the successful practice of any branch of medicine and one of the most hopeful signs for the success of the great movement that is at present time taking place in medical educational methods is the prominent place that all medical educators are giving to the subject of anatomy. The entire top floor is equipped for the proper study of this science. The rooms are light and airy and are arranged according to the most approved sanitary ideas.

Each floor is provided with lecture rooms for classes, private rooms for professors, and for students who wish to devote time to some piece of research work.

By utilizing her unexcelled clinical advantages Chicago offers exceptional opportunity to summer students. The summer is the season of the greatest mortality, and there are important groups of diseases to be seen in that portion of the year only. Hence the value of practical work in diseases peculiar to the season.

Library.

The Library is situated on the first floor, easy of access to the entire student body. It has been acquired by purchase, and by do-

nations from students, alumni and members of the Faculty. It contains a large number of reference books, dictionaries and current medical Journals.

In addition to this library, our students have access to the large general libraries of Loyola University, 47,000 volumes. In Chicago, students have access to the Chicago Public Library, 352,093 volumes; the John Crerar Library, 228,000 volumes; the Newberry Library, 179,967 volumes; and the Library of the Chicago Historical Society, 50,000 volumes.

Hospitals.

The College Hospital, known as the Jefferson Park Hospital, is a part of Bennett Medical College and is located at 1402 West Monroe street. The college by contract of affiliation has full control of the Hospital.

It has an amphitheatre capable of seating eighty students, so arranged that each student has a plain view of the pit.

During the summer of 1913, an additional wing was built, making total accommodations for 100 patients. The new Hospital embodies the latest and best ideas in Hospital construction and equipment.

The junior and senior students are required to attend clinics in this hospital daily. The students from the senior class do externe work in this hospital, two serving at one time. During this time they write histories of the patients, do the hospital laboratory work, give anesthetics under the supervision of the interne, and assist in all operations.

In addition to above is the Cook County Hospital, giving unsurpassed advantages for clinical instruction. Twelve other hospitals in Chicago are open to students of Bennett Medical College. The Dispensary and Clinic rooms are ten in number, conveniently situated in the college buildings, where over 6,000 patients are treated each year.

Directions to Students.

A student after arrival in Chicago, should come direct to the College, corner Ada and Fulton Streets, or call up the College Office by telephone, Haymarket 856. A representative will meet him and arrange for his room, and delivery of baggage. Special care is taken to select private boarding houses, where students may have the comforts of home and a quiet room in which to pursue their studies. Board and room can be had at $4.00 to $6.00 per week.

Students often procure a room and board themselves, thereby reducing the expense to below $3.00 per week.

Young men who find it necessary to meet their own expenses while attending school will be assisted in finding suitable employment outside of school hours. Our School Employment Department renders valuable service and is in touch with stores, shops, homes, express companies, janitor's services, surface and elevated railway companies, etc.

STANDING AND CERTIFICATES.

At the end of each session a certificate of standing for the year is sent by mail to each student. No marks will be sent or credits given to any student who is in arrears with the College.

FEES AND EXPENSES.

Matriculation fee five dollars.

A charge of one hundred and twenty-five dollars for tuition is payable in advance for a College year of eight months.

Tuition for the first year is one hundred dollars.

If desired, the tuition may be paid in installments, in which case no additional charge is made, and the fees are then paid as follows:

First payment:—Five dollars for matriculation fee and sixty-two dollars and fifty cents on account of the tuition, a total of sixty-seven dollars and fifty cents, payable at the beginning of the first term.

Second payment:—Sixty-two dollars and fifty cents, the balance of the tuition, payable at the beginning of the second term.

A fee of five dollars is charged for the materials used in each laboratory course.

A deposit of five dollars must be made on entrance to cover cost of breakage and damage to building or equipment. The unexpended balance is returnable at the end of the college year.

Fee for use of locker one dollar.

A fee of fifteen dollars is charged in the fifth or senior year for the course in Surgical and Obstetrical clinics at Jefferson Park Hospital.

Post-graduate fee for graduates of other schools....$125.00
Single course 50.00
Post-graduate fee for graduates of this school..... 50.00
Single course 30.00

Graduation fee twenty-five dollars.

Students leaving the school have no claim for tuition paid.

All text books can be purchased at the college library.

REQUIREMENTS FOR ADMISSION.

A medical education must be based upon a thorough preliminary training. Every student preparing to take a medical course should have as a minimum amount of preparation a high school course of four years, of nine months each, or a certificate of admission to the freshman class of a recognized university.

Those who do not possess a diploma or certificate showing the required preliminary education may take an examination conducted by the state superintendent of public instruction. In this examination each candidate is to show that he is entitled to receive a total of fifteen (15) units, five of which must be the following: English Grammar and Composition (2 years), 2; Algebra, 1; Plane Geometry, 1; U. S. History and Civics, 1; total units required, five. The remaining ten units may be earned by a successful examination in a sufficient number of the following subjects: Agriculture, ½; Astronomy, ½; Biology, 1; Bookkeeping, ½; Botany, ½; Chemistry, 1; Commercial Arithmetic, ½; Commercial Geography, ½; Domestic Science, ½ to 1; Drawing, ½; Economics, ½; English Literature, 1 to 2; French, 1 to 4; Geology, ½; German, 1 to 4; Greek, 1 to 4; History, 1 to 3; Latin, 1 to 4; Manual Training, ½ to 1; Physics, 1; Physical Geography, ½; Physiology, ½; Solid Geometry, ½; Spanish, 1 to 2; Trigonometry, ½; Zoology, ½.

An applicant for admission to Bennett Medical College must fulfill the following conditions in addition to proving the required preliminary education:

First: He must present a certificate of good moral character signed by two physicians of good standing in the state from which he comes.

Second: He must deposit with the Bursar the sum of five dollars for matriculation.

The Dean or the Council shall have the right to reject any application for admission.

ADMISSION TO ADVANCED STANDING.

Students from approved colleges will be given credit for the time spent in these colleges, upon presentation of credentials for work done and a certificate of attendance. One coming from a recognized university where he has done the work of the first or pre-medical year may be admitted to the second year of Bennett Medical College. This college reserves the right to examine such applicants. Graduates from approved medical colleges may be admitted to the senior year of this college without examination.

REQUIREMENTS FOR GRADUATION.

1. Attainment of the age of twenty-one years.
2. Creditable certificates of moral character as above from two reputable physicians must be turned in with the preliminary credentials.
3. Satisfactory behavior while in college.
4. Attendance on five courses of medical instruction of at least eight months each in separate calendar years.
5. Regular attendance during the course on all prescribed exercises.
6. Satisfactory examination in all branches.
7. Attendance on two courses of lectures in anatomy and dissection of a lateral half of the human body.
8. Graduation fee of twenty-five dollars.

The College reserves the right to terminate the attendance of any student, at any time for what may appear to the Council to be good and sufficient cause, such as incompetency, conduct unbecoming a lady or gentleman, or conduct not conducive to the morals of the class or institution; also to refuse a student the privilege of final examination for cause.

COMBINED COLLEGIATE AND MEDICAL COURSE.

In no profession is there greater need for such education than in medicine. As a preliminary step in this direction the Collegiate and Medical Departments offer an optional six-year course, including two years of collegiate work in arts and sciences, followed by two years of study in the fundamental branches of medicine. Upon the completion of the following two years of clinical study, that is, at the end of the combined six-year College and medical course, the degrees of Bachelor of Science (B. S.) and Doctor of Medicine (M. D.) are conferred.

GENERAL PLAN OF THE CURRICULUM AND SCHEDULE IN HOURS

The regular course of study in the Bennett Medical College, leading up to the degree of Doctor of Medicine, comprises a five years' course of eight months each.

The arrangement of the subjects and the hours devoted to each is as follows, but the faculty reserves the right to make such changes in the schedule as it may deem advisable:

First Year.

Subjects	Recitations	Laboratory	Total
Chemistry	96	128	224
Physics	96	128	224
Biology	96	128	224
French or German	96		96
	384	384	768

Second Year.

Subjects	Recitations	Laboratory	Total
Chemistry	96	128	224
Physiology	64	64	128
Anatomy	160	416	576
Histology and Embriology	32	96	128
Materia Medica	64	64	128
	416	768	1184

Third Year.

Subjects	Recitations	Laboratory	Total
Nervous Anatomy	32	64	96
Chemistry	96	128	224
Anatomy	64	320	384
Pathology	112	192	304
Bacteriology	48	96	144
Therapeutics	64	64	128
Surgery	32		32
	348	864	1312

Fourth Year.

Subjects	Recitations	Laboratory and Clinics	Total
Medicine	64	162	226
Surgery	96	180	276
Obstetrics and Gynecology	144	32	176
Pediatrics	32	32	64
Physiological Therapeutics		32	32
Dermatology	32	20	52
Otology and Laryngology	32	32	64
Therapeutics	64	20	84
Ophthalmology	16	16	32
Clinical Diagnosis	16	48	64
Surgical Pathology	32	32	64
Operative Surgery, etc		12	12
	528	618	1146

Fifth Year.

Subjects	Recitations	Laboratory and Clinics	Total
Medicine	96	160	256
Surgery	64	256	320
Obstetrics and Gynecology	128	96	224
Ophthalmology	16	16	32
Genito-Urinary	32	32	64
Otology and Laryngology		96	96
Neurology	32	72	104
Dermatology	32	32	64
Forensic Medicine	32		32
	432	760	1192

At the end of each term the standing of a student in each of his courses will be reported by the instructor to the Secretary and is entered on record. Records are not given to the students who are in arrears in their tuition fees.

Students' reports will bear the following grades: A—excellent; B—good; C—passable; D—repeat examination only; E—repeat entire course class work and examinations.

Work reported as of Grade D must either be made good at the next following opportunity for re-examination, or must be taken again in the class room if credit is to be obtained. Work reported as of grade E, or in which two D's have been reported must be made up in class.

All scheduled courses prescribed in this catalogue as necessary for the degree of Doctor of Medicine must be passed before graduation, or the student may repeat the study during another term and be examined with the next class. Students who have failed in the equivalent of thirty-five per cent of the work of the term must repeat the work of the term.

Candidates for the degree of Doctor of Medicine who have failed to pass all the branches required at two annual examinations must, if they stand for a third, take an examination in all the branches of the entire four years' course.

HOSPITAL POSITIONS.

House physicians are appointed from each graduating class to serve as internes, thus giving those who desire to avail themselves of this opportunity a most thorough and practical finish. Fifty internes are chosen by competitive examination to serve eighteen months in Cook County Hospital.

Bennett students are eligible to compete for these, as well as positions as internes in thirty other hospitals in Chicago and vicinity. This year every graduate who so desired was furnished with a hospital interneship.

Internes are given their board, room and laundry for their service in the hospitals. These appointments are of great value, and are much desired and sought after by the young medical graduate of today. In 1919 the hospital year will be required by the Illinois State Board.

POST-GRADUATE COURSE.

The advantages offered practitioners by this college for a post-graduate course are excellent. The studies in the senior year work are practical in every particular. They are supplemented by a variety of daily clinics in which there is opportunity for practitioners to become familiar with the latest methods, both in diagnosis and treatment. Facilities will be furnished those who desire to pursue any particular line of work.

Practitioners may enter at any time and take the work in any department of the regular course of study at moderate cost. Any practitioner of medicine in good standing may take this course.

Graduates of approved medical colleges may, by attending one full college year and fulfilling the requirements, receive the regular diploma from Bennett Medical College. This plan of post-graduate work is recommended, as it offers to the practitioner the advantage of a recent college course.

PHYSICS, CHEMISTRY AND TOXICOLOGY.

Otto Charles Huber, B. S., M. D., Head of Department.
James Kelly, S. J.
Edward Joseph Morgan, S. J.
George Louis Secord, M. S., Phar. D.
Philip Froebes, S. J.

CHEMISTRY AND TOXICOLOGY.

FIRST YEAR.

Course I.

Inorganic Chemistry: Lectures and recitations, three times each week throughout the year. The fundamental laws, theories, and principles of chemistry are studied from the standpoint of modern research and practice. The composition, phenomena attending

change of composition, properties and use of the different kinds of matter are taken up in logical sequence from their historical, industrial, economic, physiologic and therapeutic importance, in order to give the student a comprehensive grasp of the subject. 96 hours.

Laboratory Exercises: Four hours each week throughout the year.

First Term: Experiments are performed by the student bearing directly upon the class work offered. As many qualitative and quantitative reactions are introduced as possible to explain and illustrate the fundamental principles and laws of chemical action. 64 hours.

Second Term: In the last half of this term particular attention is given to the determination of unknowns. Gravimetric and volumetric methods of quantitative analyses are considered. 64 hours.

SECOND YEAR.

Course II.

Organic Chemistry: As an introduction to organic chemistry, the aliphatic and the aromatic series are covered and studied from the viewpoint of recent medical research in this fundamental branch of chemical science. 48 hours.

Laboratory: Four hours a week, first term. As many synthetic organic compounds are made in the laboratory as time will permit. They are taken from the didactic work and are selected mainly for their illustrative importance. 64 hours.

TOXICOLOGY.

Course III.

Lectures and recitations, three hours each week. Second term. The toxicology of both inorganic and organic poisons thoroughly studied.

Laboratory: Four hours a week. Second term. Laboratory experiments are given covering identification of the various poisons as well as the quantitative estimation.

THIRD YEAR.

Course IV.

Physiological Chemistry, Lectures and recitations, three hours each week, throughout the year. This course covers the whole field

of general physiological chemistry. Proteins, fats and carbohydrates studied in detail. The digestion of food by enzymes and digestive agents, as well as the intermediary and end products are considered. The chemistry of urine, blood, milk, etc., is thoroughly presented. 96 hours.

Laboratory Work: Four hours each week, second term. Laboratory experiments are given covering the above work. These experiments include work on fats, carbohydrates, protein, enzymes, uranalysis, gastric analysis, milk analysis and fecal analysis. 128 hours.

TEXT-BOOKS.

Inorganic Chemistry—Holland, Simon, Smith, Newth.
Organic Chemistry—Holland, Simon, Remsen, Cole.
Physiological Chemistry: Reference—Hawk, Saxe, Holland, Purdy, Simon's Clinical Diagnosis.
Synthetic Chemistry—Cohen, Lassar-Cohn.
Toxicology—Antenreith-Warren.

PHYSICS.

FIRST YEAR.

A general college course in mechanics, hydrostatics and heat, electricity, sound and light, presented mainly from the experimental standpoint. The subject matter which has any bearing upon the student's later medical work or has application in general medicine will be discussed fully and special applications given. The small amount of trigonometry needed to understand certain portions of the subject will be given when its necessity arises.

Lectures and Recitations three hours a week. 96 hours.

The course in Laboratory will cover the subject matter given in lecture work. Laboratory four hours a week. 128 hours.

a. First term, mechanics, hydrostatics and heat.
b. Second term, electricity, sound and light.

Text books: Hall.

DEPARTMENT OF BIOLOGY AND PHYSIOLOGY.

Frank Marion Horstman, Ph. G., B. S., M. D.
Head of Department.
Robert Roscoe Kirkpatrick, B. S.
Instructor in Biology and Physiology
George Robinson,
Instructor in Biology and Physiology.

FIRST YEAR.

Biology: General introductory course including lectures and laboratory work. Comparative anatomy, development, and phylogeny of invertebrate and vertebrate groups of animals, including lectures and laboratory work. A thorough consideration of the biology of cells, biological adaptations, biological factors in disease, evolution, variation, heredity and animal behavior.

Lectures and recitations, 3 hours per week and laboratory work four hours per week throughout the year.

SECOND YEAR.

Physiology: Physiology of Blood and Lymph, Circulation and Respiration.

Lectures and recitations two hours per week and laboratory work 2 hours per week throughout the year.

THIRD YEAR.

Physiology: Physiology of Muscle and Nerve, Digestion, Metabolism, Absorption, Secretion, Heat Production and Regulation, Internal Secretions, Central Nervous System and Special Senses.

Lectures and recitations three hours per week and laboratory work four hours per week throughout the year.

The laboratory work including animal experimentation is done almost entirely as individual experimentation by the student, graphs being made and the work thoroughly written up as the experiments are made. About 250 experiments in physiology are completed by the student in addition to the laboratory work in biology, the latter including a thorough study of the leading invertebrate and vertebrate types, with dissection of injected frogs and dogs in a detailed study of vertebrate anatomy. The work in biology makes a part of the foundation for the study of physiology in the second and third years of the course.

TEXTS.

Biology, Galloway; Smallwood; Horstman's Outlines. References—Parker and Haswell, Vols. I and II; McFarland.

Physiology—Howell; Horstman's Outlines. References—Starling: Stewart; Bainbridge and Menzies; Brubaker; Halliburton.

DEPARTMENT OF ANATOMY, HISTOLOGY AND EMBRYOLOGY.

ARTHUR BENNETT RANKIN, B. A., M. B., Head of Department.
CYRUS BLAZER MCCLURG, M. D.
BENJAMIN EDELSTEIN ELLIOTT, B. Sc., M. D.
WALTER FRANZ VON ZELINSKI, B. S., M. D.

The department of Anatomy is organized to provide for instruction in vertebrate anatomy, including human anatomy, histology, embryology and neurology. The courses in these branches are given in the second and third years. In the fourth and fifth years small sections of the classes are instructed in surgical anatomy and operative surgery on the cadaver. The anatomy of the specialties, Ophthalmology, Rhineology, Otology and Laryngology, is studied under the direction of the heads of these departments.

The anatomical laboratory is situated on the top floor of the new wing. This laboratory is large and well lighted. Space is provided for twenty-five tables. Division of the classes into sections provides ample room for successful work. The courses in Histology, Embryology and Neurology are conducted in the large laboratory for microscopic anatomy, on the same floor as the dissecting room. Each student is supplied with a modern microscope and the necessary laboratory accessories.

Each student must present evidence of dissection of a lateral half of a cadaver. The work is divided into four parts: (a) Dissection of an arm; (b) Dissection of a leg; (c) Dissection of abdomen; (d) Dissection of head and neck and thorax.

SECOND YEAR.

(a) *General Anatomy:* An elementary course for the medical student on the anatomy of the circulatory, respiratory and gastro-intestinal organs (2 hours a week). Professor Rankin. 64 hours.

(b) *Osteology:* This course is given during the first term and consists of didactic lectures (2 hours a week) and laboratory work (2 hours a week). The student is provided with bones or models of the same for study. Associate Professor Elliott and Assistants. 64 hours.

(c) *Regional Anatomy:* A didactic course consisting of two lectures a week covering the part being dissected; laboratory work consisting of dissection, drawings and rigid quiz work. This course, comprising 16 hours a week, is continued throughout the year. Professor Rankin, Associate Professors McClurg, von Zelinski and Elliott. 480 hours.

(d) *Cytology, Histology and Embryology:* A brief introductory course on the structure of the cell and the classification of tissues, followed by a systematic study of the structure of the organs and human embryology. This course is given during the second term; it consists of didactic lectures (2 hours a week) and laboratory work, consisting of staining, mounting and microscopic study of normal human tissues, illustrated by lantern demonstrations (6 hours a week). Professor Rankin and Assistants. 128 hours.

THIRD YEAR.

(a) *Regional Anatomy:* Didactic lectures (2 hours a week) and laboratory work (10 hours a week), covering the remaining parts to be dissected. This course is continued throughout the year. Professor Rankin, Associate Professor Elliott, Drs. Howser, Kenny, Paradine and Gehl. 372 hours.

(b) *Neurology:* Didactic lectures (2 hours a week) and laboratory work (4 hours a week) during the second term. This course consists in the study of the gross anatomy of the sheep's brain and human brain and cord. Professor Rankin and Assistants. 96 hours.

FOURTH AND FIFTH YEARS.

(a) *Surgical Anatomy and Operative Surgery on the Cadaver:* This course is given in the anatomical laboratory under the direction of the department of surgery. 64 hours.

(b) *Anatomy of the Ear, Eye, Nose and Throat:* A special course conducted under the direction of the head of this department.

DEPARTMENT OF BACTERIOLOGY, PATHOLOGY AND HYGIENE.

Maximilian Joseph Herzog, M. D., LL. D., Head of the Department.
Cleveland Charles MacLane, M. D. C.
June Edmondsen, A. M., M. D.
George Louis Secord, M. S., Phar. D.

Laboratories: The Bacteriological and Pathological laboratories are found on the fourth floor of the main building. They are well ventilated, clean, and with the advantage of the north light for microscopic work. The laboratories are well equipped with apparatus for all kinds of work in Bacteriology and Pathology and include microscopes, complete with oil immersion lenses, apparatus needed for preparing culture media, etc. An assortment of reagents

and museum specimens of pathological conditions are found in the Museum to which considerable additions have recently been made.

Bacteriology and Protozoology.

THIRD YEAR.

First Term:
Two lectures per week—(32 hours.)
Recitations—1 per week—(16 hours.)
Laboratory: 2 periods per week at 3 hours—(96 hours.)

This subject is taught in lectures and recitations and in the laboratory. The lecture course will first deal with general bacteriology such as morphology and biology, etc. Under this head also will be taken up Ehrlich's side chain theory of immunity, the different serum reactions including the complement fixation test (Wassermann test), etc. The more important non-pathogenic and all of the important pathogenic bacteria will be studied, particularly in the laboratory course where the student will become familiar with the methods of preparing culture media, obtaining pure cultures, observing bacteria in the live state and in permanent stained specimens. The latter must be drawn and described. Such tests as the Widal test, the Wassermann test, etc., will be demonstrated and practiced by the student.

This course also includes the study of the microscopic diagnosis of rabies and of the most important microbic tropical diseases and of such protozoa as plasmodium malariae, amoeba histolytica, trypanosoma, the Donovan-Leishman bodies, piroplasma, sarcosproidia, etc.

General and Special Pathology.

THIRD YEAR.

First Term: General Pathology.
Two lectures per week—(32 hours.)
Recitation—1 hour per week—(16 hours.)
Laboratory: 2 periods per week at 3 hours—(96 hours.)
Second Term: Special Pathology.
Two lectures per week—(32 hours.)
Recitation—1 hour per week—(16 hours.)
Laboratory: 2 periods per week at 3 hours—(96 hours.)
Laboratory lectures and demonstrations on the intestinal parasites of man and the domestic animals.
One lecture per week—(16 hours.)

The subject of Pathology is taught by systematic didactic lectures, by recitations, autopsies and in the laboratory. The lectures will cover the whole domain of general and special pathology and

they will be illustrated by means of post-mortem specimens prepared by the Kaiserling method, microscopic sections and lantern slides projected on the screen. The laboratory course in pathology is given by the professor and his assistants in connection with and following the lectures and demonstrations. Particular stress is laid upon the laboratory course in general pathology, which necessarily must form the foundation for all studies in histo-pathology. No student can ever expect to acquire any degree of skill in microscopic pathologic diagnosis unless he masters general pathologic histology. Hence the students will be required to stain and mount a complete set of 100 or more sections representing such subjects in general pathology as disturbances of circulation, thrombosis and embolism, edema, hemorrhage, necrosis, degenerative cell changes, gangrene, cloudy swelling, fatty infiltration and degeneration, fat necrosis, hyaline degenerations, cornification, petrification, ossification, pathologic pigmentation, regeneration, atrophy and hypertrophy, inflammation acute, subacute and chronic. The infectious granulomata like tuberculosis, syphilis, actinomycosis, glanders, botryomycosis, blastomycosis and finally tumors, benign and malignant, connective tissue—epithelial and mixed neoplasms will be thoroughly studied in sections. The student will be required to draw and describe each section mounted, his collection of sections and his drawings and descriptions will form part of his record and grade in pathology.

Special pathology will likewise be studied in the laboratory and the students will be required to prepare, draw and describe the sections.

The students will also be familiarized with the common methods of fixing, embedding and sectioning pathologic material, the use of the microtome, etc.

Intestinal parasites of man and the domestic animals. This subject will be taken up in laboratory lectures and demonstrations during the third year in the second term.

Autopsies. Post-mortems are held at the Cook County Hospital by the head of the department who is one of the pathologists of this institution. Each student must attend at least thirty autopsies and he must furnish at the end of his junior year at least 30 complete post-mortem protocols of autopsies which he has attended. Pathologic material will be collected at the autopsies and will be worked up in the laboratory and studied by the students. A limited number of students will be permitted to attend autopsies held by the head of the department and his assistants in other hospitals.

Hygiene and Sanitary Science.

The course in Hygiene and Sanitary Science will be given work and practical demonstrations. The subjects covered will be on the

hygiene of the principal foods such as meat, milk, vegetables, beverages, on food preservation, adulteration, on air, water, sewage and their relation to disease, on ventilation, disposal of garbage, disinfection, occupational diseases, vital statistics, personal hygiene, etc. Excursions will be arranged to places of interest in connection with the didactic work.

Research Work in the Department of Pathology, Bacteriology and Hygiene.

A limited number of advanced students, who have shown special aptitude will be encouraged to pursue research work. This will be conducted under the direction of the head of the department.

DEPARTMENT OF THERAPEUTICS AND PHARMACOLOGY.

Leo Steiner, M. D., Head of Department.
Milton Wiess, M. D.
Richard Jay Lambert, Ph. G., M. D.
Alfred Theophilus Davis, M. D.

The Department is organized and equipped for teaching the subject in accordance with the latest scientific conception of laboratory instruction.

The Materia Medica Laboratory work comprises a critical study of crude drugs; preparation of an individual materia medica cabinet of thirty-six specimens; a comprehensive synopsis of essential facts relating to all important drugs by each student; manufacture by the student of representative preparations under instruction.

The experimental study of the action of medicines is undertaken in a laboratory equipped with all essentials, including kymographic tracings of the influence of the more important drugs.

The didactic work includes lectures and recitations in equal numbers. In the second year Materia Medica is taught by one lecture and one recitation a week. 32 hours. In the third year by one lecture and one recitation a week. 32 hours. In the fourth year the work in Therapeutics consists of a critical study of the physiological action of medicines, tracing out their specific influences upon the various corporeal systems. The therapeutic indications based upon the physiological action follow as a natural process of reasoning. The technical methods are exemplified by the writing of extemporaneous prescriptions suitable for a large number of hypo-

thetical cases. These prescriptions are revised by the instructors and returned with comments to the students.

The course for the fourth year includes one recitation and one lecture a week, (64 hours,) and two hours a week of laboratory work (20 hours.)

The course is so graded that the student passes from the simple study of the properties of medicines to the knowledge of their actions, and thence to the knowledge of their indications in combating diseased conditions.

DEPARTMENT OF MEDICINE.

Nathaniel Abraham Graves, A. B., M. D., Head of the Department.

William John Pollock, B. S., M. D.
Charles Joseph Whalen, M. A., LL. B., M. D.
Charles Albert Wade, M. D. (Pediatrics)
Arthur Henry Weis, M. D. (Gastrology)
Henry Aaron Norden, M. D. (Chest Diseases)
Leslie Frederick MacDiarmid, M. D.
Roland Hodges Phillips, Ph. G., B. S., M. D.
Arthur Edward Lehner, M. D.
George Leonard Apfelbach, A. B., M. D.
Maximilian Herschleder, M. D.
Harry Nathan Weil, M. D.
Cleveland James Shambaugh, M. D.
Isaac Valera Friedman, M. D. (Pediatrics)
Rose Vorsanger, M. D. (Pediatrics)

Course I.

The subject of Medical and Clinical Diagnosis is taught in the fourth year. The students will be required to make examinations of the urine, sputa, stomach contents, and make blood counts on all clinical material which requires such examinations, thus making them proficient in the work. The report of such examination is to be filed with the history of the case for record and as an aid to the clinical instructor. The laboratory work will be supplemented with lectures and quiz work on the subjects taught under this heading. An average of two hours per week will be required for this course. 64 hours.

Course II.

This course will be on the important subject of Diseases of Children. The subject will be taught to the fourth year class by recitations and clinics two hours per week. A thorough course on infant feeding has been planned, including the artificial foods and their respective values and the modifications of foods. Lectures and quizzes on all the diseases of infancy and childhood will be a regular part of this course and the abundant clinical material at our free clinic will give ample opportunity for the student to become familiar with the clinical forms of the diseases and watch the results of careful medication. 64 hours.

Course III.

General Medicine: This course has been very carefully graded and is given to the fourth and fifth years.

We fully realize that after students have received instruction in the fundamental branches, that this is their most important study, for when they begin actual practice they will see and treat more cases in general medicine than in all the other subjects put together; therefore, we aim to make the instruction in this branch so thorough that when the student has finished the course he will be able to diagnose and treat intelligently any of the diseases in general medical practice.

It is our aim to give the students confidence in medicine, and to drill them so thoroughly in the application of remedies to certain definite diseased conditions that they may get the best possible results from the use of such remedies.

In the fourth year we are allotted five hours per week for this subject and the course consists of lectures, recitations and clinics, particularly of the class of cases that are covered in the recitation work, so that each disease, as far as possible, is illustrated in this manner. 160 hours.

In the fifth year we also have eight hours per week devoted to general medicine and in this year of the work it is our aim to teach everything that is practical in general medicine, so that when the student leaves the college he will go with that confidence in medicine that he will apply it successfully and he will go with the idea that he must study each individual case and apply his remedies according to the conditions found present. 252 hours.

The fifth year will be required to attend clinics at Jefferson Park Hospital, Cook County Hospital and other hospitals which may be arranged for, and under the direction of the instructor examine, diagnose and prescribe for the clinic patient. This will give them

instruction in obtaining the history of the case, physical examination, differential diagnosis, the application of remedies to the conditions found present and prescription writing.

We will endeavor as nearly as possible to arrange the lecture course so that we may get clinic cases to illustrate the work.

DEPARTMENT OF SURGERY.

John Dill Robertson, B. S., M. D., Head of Department.
William Beringer Marcusson, A. M., M. D.
Anton Theodore Harris Holmboe, M. D.
Frank Byrnes, M. D.
Arthur Bennett Rankin, B. A., M. B.
Benjamin Harrison Breakstone, B. S., M. D.
Hugh Neil Mac Kechnie, B. A., M. D., C. M., F. T. M. C.
Anthony Augustus O'Neill, Ph. D., M. D.
George de Tarnowsky, M. D.
Camillo Volini, M. D.
Arthur Edison Gammage, M. D.
William Joseph Hurley, M. D.
Jack Moses, M. D.
Eugene Laurence Hartigan, Ph. B., S. B., M. D.
Thomas Albert Carter, B. S., M. D.
Charles Newton Gartin, M. D.
Elmer Holmes Flinn, M. D.
Thomas Downes Laftry, M. D.

The student begins his training in this department at the commencement of his fourth year. He is taught modern aseptic methods, the preparation of a patient for operation, the preparation of the surgeon, the identification and sterilization of instruments, the preparation of dressings, the use of rubber gloves, and all the small but essential details of modern surgery.

A course in Surgical Pathology including Infection and Immunity, Inflammation, Examination of the Blood in Health and Disease, Non-specific Pyogenic Infections, Ulceration, Gangrene, Specific Infective Diseases, Tumours and Cysts, Wounds, and the General Technique of Operative Surgery, is covered in clinical lectures, two hours a week. 64 hours.

FOURTH YEAR.

Didactic Surgery, General and Special. Sections of the class meet two hours a week under each of the following, Professors Mac Kechnie and Rankin, and Assistant Professors, Hartigan, Hurley and Carter. 64 hours.

Operative Surgery, cadaver and dog, divided classes, three hours each week for four weeks under Professor Rankin and assistants. 12 hours.

Surgical Diagnosis and Operative Clinic at Jefferson Park Hospital, two hours each week throughout the year under Professor Rankin and Clinical Assistant, Dr. Gartin. 64 hours.

Dispensary Clinics at Bennett Medical College, divided classes, five times a week for four weeks, between 2-3 P. M. 20 hours.

Surgical Clinics, divided classes three hours each week for four weeks at each of the following hospitals, 12 hours:

Jefferson Park Hospital, Assistant Professors Laftry and Dr. Moses.
Lakeside Hospital, Professor Mac Kechnie.
Columbia Hospital, Professor O'Neill.
Columbus Hospital, Professor Byrnes.
St. Bernards Hospital, Assistant Professor Hurley.

FIFTH YEAR.

Didactic Surgery, Clinical Lectures, to the entire class are given in the Amphitheatre of the college three hours each week by Professors Byrnes, Rankin, Mac Kechnie and O'Neill. 96 hours.

Clinical Lecture, one hour each week in Orthopedic Surgery, Professor Holmboe. 32 hours.

Surgical Diagnosis and Operative Clinic, two hours each week at Jefferson Park Hospital under Professor Robertson and Assistant Professor Gammage. 64 hours.

Surgical Clinic two 1-hour periods each week at Jefferson Park Hospital under Professors Marcusson and Breakstone. 64 hours.

Orthopedic Clinic at Norwegian Deaconess Hospital, divided classes, each section having four weeks under Professor Holmboe. 12 hours.

Surgical Clinic, two hours each week by Professor Tarnowsky at Cook County Hospital. 64 hours.

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY.

Henry Foster Lewis, A. B., M. D., Head of Department.
William Rittenhouse, M. D.
Alfred deRoulet, M. S., M. D.
Stuart Johnstone, M. D.
Frances Helen Cook, M. D.
Jack Ralph Lavieri, M. D.
Harlan Daniel Sheldon, M. D.
Benjamin Edelstein Elliott, M. D.
George Francis Gates, M. D.
Herbert Weir Gray, M. D.

The courses in Obstetrics and Gynecology are conducted in correlation throughout the fourth and fifth years. The instruction comprises lectures, recitations, demonstrations, out-patient and hospital clinics, and exercises with the mannikin.

FOURTH YEAR.

Lectures and recitations on the Anatomy and Physiology of the Female Pelvis and Generative Organs. 16 hours.

Methods of Gynecological Examination and Diagnosis, Functional Gynecological Disorders. 32 hours.

Clinics at the Jefferson Park and other hospitals on diseases of women. Dispensary Clinics four times a week.

Lectures and Recitations on the Physiology of Pregnancy, Labor and Puerperium. 96 hours.

FIFTH YEAR.

Lectures and Conferences on the Pathology and Treatment of the Female Generative Organs. 64 hours.

Clinics at the Jefferson Park, Cook County and other hospitals on Diseases of Women. 96 hours.

Personal attendance at the Jefferson Park Hospital and affiliated hospitals, where the students will be required to assist in diagnosis and treatment of patients under the personal charge of members of the faculty.

Lectures and Conferences on the Pathology of Pregnancy, Labor and Puerperium. 64 hours.

Clinics on Midwifery at Jefferson Park and other hospitals and at patients' homes under charge of instructors.

Practical exercises on the obstetric mannikin; to the class in small sections.

Textbooks: Crossen's Diseases of Women; Davis Manual of Obstetrics; Peterson's Obstetrics; Dr. Lee's Obstetrics.

DEPARTMENT OF OPHTHALMOLOGY.

JACOB FRANKLIN BURKHOLDER, M. D., Head of the Department.
CHARLES AUGUSTUS BURKHOLDER, S. B., M. D.
DOUGLAS AMOS PAYNE, M. D.
ELZEAR LAMOTHE, M. D.
CARL WAGNER, M. D.
WILLARD SEYMOUR BRACKEN, M. D.,

The work in this department is designed to meet the requirements of those intending to become general practitioners of medicine. The instruction is thoroughly practical and consists of the following courses:

FOURTH YEAR.

The work in this course will consist largely of laboratory exercises and clinical demonstrations. The class will be arranged in small groups of students in order that each may have personal instruction.

The preliminary work will embrace the study of the gross anatomy of the eye and its appendages. Bullocks' eyes are frozen and cut, and then allowed to thaw under water, insuring a minimum of disturbance in structural relationships. Sections through the equatorial and sagittal meridians are drawn and studied. This exercise will give the student a knowledge of the anatomy of the eyeball in these dimensions.

The study of the gross structures of the eye will be followed by histological demonstrations and drawing. The minute anatomy of the important tissues will be studied with reference to physiology, pathology and etiology.

The student will be initiated, during this course, into the value of the ophthalmoscope to the general practitioner. Exercises will be carried on by means of the schematic eye.

Attention will be given to the various ophthalmic manipulations, as oblique illumination, everting the lids, removal of foreign bodies from beneath the lid, etc.

Elementary refraction will be considered, and its correlation to local and general symptoms explained. Once a week. 32 hours.

Text-book: May.

FIFTH YEAR.

Systematic lectures will be given on the commoner diseases of the eye and lids. Special attention will be given to the differential diagnosis of ocular diseases.

Consideration will be given to the prevention as well as the treatment of the serious conjunctival inflamations.

The study with the ophthalmoscope will be continued in this course.

The relationship of the eye to general diseases and the far-reaching influences of errors in refraction and their complicated reflexes will be explained.

The minor surgical operations will be demonstrated on the cadaver. Once a week. 32 hours.

Text-books: Weeks, Fuchs, Parson.

DEPARTMENT OF RHINO-OTO-LARYNGOLOGY.

Ulysses Joshua Grim, M. D., Head of Department.
William Allen Porter, M. D.
William K. Spiece, M. D.

In the work of this department clinical teaching will be the special feature.

FOURTH YEAR.

Lecture once a week. 32 hours.
Clinic, one hour a week to class in sections. 32 hours.
Minor practice to sections.

FIFTH YEAR.

Clinic once a week at college. 32 hours.

Clinic twice a week in sections at Illinois Charitable Eye and Ear Infirmary. 64 hours.

Practical course in ear and nose surgery on cadavers and animals to advanced students. Elective.

Text-books: Ballinger, St. Clair Thompson, Wendell Phillips, Gleason.

DEPARTMENT OF DERMATOLOGY AND SYPHILOGRAPHY.

KASIMIR AMBROSE ZURAWSKI, M. D., Head of the Department.

FOURTH YEAR.

Weekly Lecture. Introduction into dermatology—physiology of the skin—demonstration of histology by projection on screen. Didactic lectures thereafter—special dermatology illustrated by plates, photographs and by demonstration of patients. 32 hours.

FIFTH YEAR.

First term: Weekly lecture on syphilis of the skin and the mucous membranes with demonstration of spirochetae by darkfield illumination, and by stained specimens. Demonstration of plates and patients. 16 hours.

Second term: Lectures on special dermatology, illustrated by plates, photographs and patients. 16 hours.

During both terms bi-weekly clinical lectures at the college or at the hospitals to classes of not more than twenty students, the list changing monthly in rotation. 32 hours.

The department in conjunction with our department of pathology has been able to get together a valuable collection of specimens and slides on various dermatological subjects. Among others the department has what is believed to be the greatest collection of cultures of different pathogenic fungi, especially those of interest to dermatologists.

The specimens taken at will from this collection will be studied by the students in small sections under the guidance of some of the members of the department.

Text-books: Stelwagon, Shamberg.

DEPARTMENT OF NERVOUS AND MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

EDGAR MEAD READING, A. M., M. D., Head of the Department.
ARTHUR GAMMAGE, LL. B.
THOMAS S. HOGAN, LL. B.
ULYSSES GRANT DARLING, M. D.
THOMAS STANLEY CROWE, M. D.

Course I.

The diseases of the brain and nervous system are taught to the fifth year class by lectures, recitations and clinics twice a week. 64 hours.

Neurological Anatomy is taught in a special course in the anatomica department.

Course II.

This course is taught to the fifth year class and deals with the legal subjects of interest to the medical graduate. The subjects of malpractice, expert testimony, the legal aspects of impotency, sterility, rape, pregnancy, legitimacy, infanticide, wounds, poisons, feigned disease and survivorship are thoroughly discussed. 32 hours.

Course III.

Neurology.

The work given in this section will be under the charge of Professor Burkholder, and will be entirely devoted to the study of the physiological anatomy of the central nervous system and the neuron. The gross anatomy will be largely a review of the laboratory exercises of the preceding year, with special demonstrations on the human encephalon.

The study of the neuron body will receive particular attention, for the reason that in the brain, as in other tissues, the cell is the anatomical as well as the physiological unit. Slides of nerve tissue, stained by the various processes, as Nissl, Golgi and Pal-Weigart, will be supplied to the student for study and drawing. This will give him a working knowledge of the morphology and internal architecture of the neuron body that can be acquired in no other way. Professor Burkholder and Assistants. 40 hours.

Text-books: Reading's Lecture Notes. Allchin.

DEPARTMENT OF GENITO-URINARY DISEASES.

Felipp Kreissl, M. D., Head of the Department.
Charles Henry Solmon, M. D.
Charles Ely Coleman, B. S., M. D.

The work of this course is carried on by recitations and clinics and all of the diseases of the Genito-urinary system are studied in the fifth year. 32 hours.

The clinical work is conducted in the college building every afternoon between 2 and 3 p. m., except Sundays. Also at the Jefferson Park and other hospitals, where there is an abundance of clinical material. 32 hours.

The student is taught the intravenous method of Salvarsan treatment, the use of the urethroscope, cystoscope and other instruments

employed in this class of cases for diagnostic and therapeutic purposes. Each student is also required to personally examine and treat the patients under the supervision of the teacher.

DEPARTMENT OF PHYSIOLOGIC THERAPEUTICS.

Noble Murray Eberhart, A. M., M. S., M. D.,
Head of Department.
Gordon Granger Burdick, M. D.
Mr. Edwin Wachlin.

Realizing the importance of the application of therapeutic agents outside of drugs, the College has established a Department of Physiological Therapeutics, which will include instruction in the use of all electrotherapeutic measures (including galvanism, faradism, high frequency, X-ray, etc.), and will also include vibration, phototherapy, hydrotherapy, psychotherapy, serotherapy and other non-drug methods.

Instruction in the X-ray will be supplemented by practical work in the Jefferson Park Hospital, where students will be taught the technique of making and interpreting X-ray pictures, under the supervision of Mr. Wachlin. 32 hours.

DISPENSARY COMMITTEE.

Henry Aaron Norden, M. D.
Alfred de Roulet, M. D.
Charles Albert Wade, M. D.
Daisy Eva Truby, Superintendent.

DISPENSARY CLINICS.

The clinic is divided into ten departments for the study of the various diseases. Every student is assigned to a given room for a stated period, when he is transferred to another, and in that way each must devote a certain portion of his time to each clinic. The members of the clinical staff are in attendance from 2 to 3 p. m. daily, throughout the year, except Sundays and holidays.

The work is so arranged as to give every student the best possible advantage in making diagnoses, outlining treatment, which includes a review in prescription writing and the physiological action of drugs. An attending physician in each room assists the student, confirming his diagnosis, writing the prescription, and quizzing over the different points of interest with each patient.

The clinical laboratory is also arranged in this department, where students are assigned to a period of laboratory work. In this work they get the same experience as if in a private laboratory in their own offices, making examinations of specimens which are collected throughout the clinic.

Students who fall short in their attendance in the regular clinic hours during the year must attend clinical work during the summer.

Students must conduct themselves in a decorous manner in the clinic rooms, and patients must be treated with the same consideration as in a private office.

Students are not allowed in any clinic room but that to which they are assigned, except by permission of the instructor to whom they are assigned, nor can they get credit for attendance unless they are actually present at roll call and remain in attendance.

All students entering the clinic must provide themselves with the following instruments: Clinical thermometer, stethoscope, head mirror, ear speculum, ear syringe, nasal speculum, tongue depressor, laryngoscopic mirrors, probes and applicators.

Students not providing themselves with these instruments of diagnosis will not be permitted to attend.

St. Margaret's Home,
2501 West Monroe Street.

There will be clinics in Pediatrics under the charge of Dr. McCarthy; Obstetrics and Gynecology under Dr. de Roulet and house Obstetrical clinics exclusively to Bennett classes in sections of ten.

ALUMNI ASSOCIATION.

Officers:

Walter Franz Von Zelinski, M. D., President, Chicago.
Eleanor Fish, M. D., Secretary, Chicago.

The annual meeting of the Alumni Association will be held at the College Building, corner of Ada and Fulton Streets, June 1st, 1915, at 10 a. m.

The total number of Alumni of these schools is 2,700, making one of the largest Medical Alumni Associations in Chicago.

All correspondence relative to Medical Alumni Association matter should be addressed to Eleanor Fish, M. D., 919 Winthrop Court, Chicago, Ill.

GRADUATES, SEPTEMBER 26, 1914.

Anguish, Eber
Breiter, Martin H.
Costanzo, Ralph E.
Day, Walter August
Downing, Earl Ebert Raymond
Forbes, James Franklin
Goenne, William Carl
Johnson, John Peter
Lancaster, George Edward
Lichner, Samuel
Loewy, Joseph
Meads, Ezra Leslie
Merrill, Llewellyn C.
Moore, Harris Carnahan
McDermott, Cornelius J.
Rathbun, Clarence Addison
Stokes, Albert J.
Waters, William Joseph
Worrell, Joel Darrah

GRADUATES, JANUARY 30, 1915.

Apostolides, Emanuel
Blomgren, Walter Lawrence
Compton, John Wallace
Davis, Amy Reams
Egan, Thomas Martin
Frauer, Edgar Albert
Middleton, Emanuel E.
Newman, Leon
Schwarz, Frank Joseph

GRADUATES, JUNE 1, 1915.

Amoros, Gabriel
Arnold, Ferris Lyle
Baker, Andrew Patrick
Bau, Hyman William
Bennewitz, Anthony Hugo
Brown, Otto Richard
Brust, Edmund George
Chiasson, Placid Nelson
Conn, Hugh Irving
Connolly, Ira
DeLay, Eli Milton
Devereux, Richard Leo
Dittmore, Joseph Ambrose
Donasier, John J.
Donovan, Michael F. J.
Dornbusch, Franklin Henry
Dougherty, Xenophon Best
Dow, Julian Neal
Duffy, Mark Matthew
Elders, Frank Alvin
Elmer, Raymond Frank
Feser, Raymond Leonard
Foster, Robert Leonard
Foulkes, William Alexander
Gunderson, Elmer Alfred
Hehir, Joseph
Hendley, Charles
Hertel, Paul
Horn, Clinton
Huber, Gale Waite
Jackson, Edward
Jarrell, Robert Earle
Jenks, Isaac Chancy
Johnston, Joseph Andrew
Kell, Chance T.
Kietzer, Edmund Ewald
Knochel, Joseph Martin
Konle, Adolph Ralph
Kreml, Otto Anthony
Lyons, George Conner
McChesney, David Henry
McQuaid, Arthur Francis
Montfort, Roy Melloy
Norris, Clarence Oliver
Oldfield, Raleigh Charles
Parham, John Bernard
Pearce, Franklin Benjamin
Pollard, John Dustin
Remington, Sheppard
Rice, Carroll Wendell
Robertson, Ira Boyd
Schmidt, Karl Hermann
Shafer, Abe, Jr.
Sondel, Louis Carl
Stapleton, Willard Pierce
Stevens, Stephen
Wallingsford, William Jewell
Walsh, Thomas Francis
Washburn, Benson Earl
Wawrzynski, Wenceslaus J.
Weber, Joseph George
Wolin, Benjamin Maurice
Zak, Joseph John

MATRICULANTS FOR THE SESSION OF 1914-1915.

Abbreviations for periods of attendance:
No mark—Entered October, 1914.
Letter S—Entered June, ———.
Letter W—Entered February, ———.

PRE-FRESHMAN CLASS.

Becker, Peter Bryant
Byrne, Robert J.
Hastings, Della Josephine
Jarzembski, Casimir
Kalvelage, Edward B.
Kopprasch, William Albert
MacKowiak, Felix
McDonnell, Owen Joseph
Malouf, Charles Salem
Nied, Harvey E., W-'15
Quigley, Esther Frances
Rankin, Melville Dwight
Sarpalius, John
Smith, Herbert P., W-'15
Sotirakos, Spiros Dimitreos
Watry, Oliver Joseph
Whamond, Robert Finley

SPECIALS.

Fisher, Bertha Gae
Harkes, Jennie Sophia

FRESHMAN CLASS.

Arthur, Esmond Russell
Barth, Walter James
Beck, Karl Mikael, S-'14
Bolstead, Stanford Theodore
Breese, Sidney Irwin, S-'14
Copia, George Henry Joseph, S-'14
Croutch, Benjamin Franklin, S-'14
Dry, Frank Mortimer, S-'14
Feldott, Harry Raymond, S-'14
Flanan, David James, S-'14
Furry, Abe D., S-'14
Goldfield, Bernard, S-'14
Halpin, Franklin J., S-'14
Hutchinson, Joseph P., S-'14
LaDuron, Jules F., W-'15
Lattman, Oswald D., S-'14
Linek, Steven, S-'14
McKenzie, Hector D., S-'14
Makar, Ignatius, S-'14
Rembe, Boyd C., S-'14
Reich, Stanley Henry
Reiffel, Michael I.
Ruzic, John Frank, S-'14
Sanderson, Melville
Smith, Glenn Morton
Smith, John Francis
Tierney, George Francis, S-'14
Troy, John Edward, S-'14
Van Duine, Wesley, S-'14
Wojczynski, Aloysius Joseph, S-'14

SPECIALS.

Braginton, Fred
Morrison, Richard John

SOPHOMORE CLASS.

Alexander, Charles Burton
Altman, David, W-'15
Anderson, Earvye Harry, W-'15
Aton, Maurice William
Axelrad, Samuel
Belensky, John J.
Berdecia, Ramon Berrios, W-'15
Black, Orville E.
Boberg, Arthur Lawrence
Brinkman, Waldo F., W-'15
Campbell, Duncan D.
Charriez, Juan Lastra
Chavarry, Jaime Serra, W-'15
Connor, Charles Henry
Coppens, Jesse Brenton, W-'15
Coughlin, John P., W-'15
Dickinson, Charles H.
Dougherty, Leslie Dwight
Eastman, Kent Lewis, W-'15
Eterno, John, W-'15
Fein, Alfred
Freeman, Roy Harvey
Freund, Charles Anton, W-'15
Glatt, Morris A.
Goergen, Philip C.
Gorecki, Helen E.
Hernandez, Jose Antonio, W-'15
Hoeffel, Joseph Clement, W-'15

Holland, David Lewis
Howard, William H.
Howell, Dennis Herman, W-'15
Izquierdo, Eladio, W-'15
Johannesson, Carl Johan
Johnstone, James Carlyle, W-'15
Johnstone, Kristine
Jones, Catherine C.
Jusatus, Bernard Felix, W-'15
Koppa, Walter George, S-'14
LaMarre, Victor Nazaire, W-'15
Lescher, Henry G.
Looney, Vernon L.
MacLane, Cleveland C.
McCrary, George W.
McCroskey, William Herbert
Malone, Leo Vincent
Matlock, Charles William
Matushek, William Anton
Meyer, Keith T.
Mix, Bronislaus
Monaco, Donat F., W-'15
Montvid, Anthony
Nathanson, Israel, S-'14
Nylander, Emil Gustav
O'Brien, Richard Joseph, W-'15
O'Connor, Deno F., W-'15
Opitz, John Hoff
Otteraaen, Andrew
Pawling, Philip Sheridan
Phelan, Thomas F. X.
Rasmussen, Carl W. H., W-'15
Reich, Ernest
Reich, Morris
Reich, Robert, W-'15
Reyes, Antonio Ramon, W-'15
Robinson, George
Sandler, Arthur
Schwager, Isidor
Shea, Daniel E.
Sogolow, Paul B.
Sondel, Herman M.
Watkins, Raymond M., W-'15
Weidlein, Floyd Henry, S-'14
Woelffel, Lucinda M.

SPECIALS.

Freedman, Joseph H., W-'15
Harrell, Roy W.
Keeton, Robert Taylor, W-'15
Mintek, Stanley, W-'15
O'Connell, John, S-'14
Schwartz, Nathan, S-'14
Troupa, Albert B.
Ulmer, Herbert D., S-'14

JUNIOR CLASS.

Anderson, James V.
Bengoa, Jose Tomas, W-'15
Benkendorf, Bernard
Betthauser, Joseph R.
Black, Byron Bayard, S-'14
Boehm, Robert Gustav
Bossard, Samuel LeRoy
Boyer, Carl C. E.
Brandon, Walter Lee
Burke, Alexander W.
Byrne, Maurice William Kirby
Caban, Edelmiro J.
Chiasson, Joseph Paul, W-'15
Chiasson, Marcellin J.
Chiasson, Timothy
Cicotte, Fredrick Joseph
Collins, Veda Nathalie
Dailey, Robert Wood
Davidson, Finis F.
Dillard, George Penn
Dittmore, George W.
Dixon, Willis L.
Dunham, Royal W.
Eterno, James
Falk, Herman W.
Farah, Michael I.
Feldman, William
Finkel, Morris
Finkelberg, Ivan Louis
Fuentes, Oscar J.
Gburczyk, Frank Henry
George, Raymond Horace
Glover, Charles Westley
Gomberg, Harry, W-'15
Goodwin, Grover Cleveland
Gotay, Jose Beleu
Graulau, Luis M.
Graves, Nathaniel Van
Gundrum, Mark D.
Hall, Walter Dawson
Haney, Irl S.
Harris, Clarence P.
Heiligenstein, Rudolph C.
Heiss, John Ernest
Hennessey, Russell A.
Henricksen, Karl J.
Herschel, George Everritt
Highsmith, Charles Otto, W-'15
Highsmith, Luther Byrl
Honore, Sabas, Jr.

Hradnyansky, Charles, W-'15
Hubbard, Samuel Meyers
Jackson, Lewis L.
Jonikys, Joseph J.
Kalisz, Walter F.
Kan, Louis Joseph
Karal, Anthony J.
Kegel, Arnold H.
Keho, J. Arthur
Kelly, Raymond Martin
Keshishian, Sarkis K.
Kirkpatrick, Robert Roscoe, W-'15
Klein, George A.
Kollar, John Anton
Kruse, Henry
Langford, Earl K.
Leguen, Jorge
Lindholm, Henning O.
Little, Harvey Thomas
McSparin, John Monroe
Malloy, Francis V.
Manduley, Bernardo
Maurer, Frank Roy
Mauricau, Van Buren
Mayer, Emil Valentine, W-'15
Milliken, Allen P.
Mock, Frank Xavier
Modert, Alson W.
Mohr, Walter Carl
Nicholson, Niles Henry, W-'15
Nielsen, Carl Martin
O'Farrell, Patrick
Omens, David, W-'15
Osborne, A. Null
Passarella, Frank A., Jr.
Pellettieri, John
Pickett, William Joseph, W-'15
Pindell, Merl Lee
Poling, Owen
Porter, Arthur S.
Powers, Frank Lawrence
Provost, Benjamin W., W-'15
Pruner, A. Caskie, W-'15
Read, William Roscoe
Restos, Ynigo Hernandez
Sarginson, Rollo B.
Showalter, Irene Helen
Slaney, Andrew Francis
Sodaro, Anthony, W-'15
Soldinger, Joseph L.
Stefanski, Helen Fadora
Stokes, Bessie
Sullivan, Noreen Marie
Swanson, Charles A., W-'15
Swanson, Harry Theodore
Sweany, Raymond B. T.
Szubczynski, Norbert F.
Trowbridge, Chester Warren
Van Arsdall, Ernest P.
Van Slyke, Clifford E.
Vertin, Joseph David

SPECIALS.

Anderson, G. Franklyin, S-'14
Brown, Everett Rhea, S-'14
Buehler, Anna, S-'14
DeAlarid, Leon J. Perez, S-'14
Dobbins, Thomas, S-'14
Feldman, Max
Glasener, Charles F., S-'14
Haughey, George C., S-'14
Heda, Frank
Hurley, Edward T., S-'14
Jarrell, Mary Wynn
Johnson, Anna Charlotte, S-'14
Kadlitz, Frank, S-'14
King, Wilhelmenia
Kunce, Fay E., S-'14
Lucari, E. Cumpiano
McGuire, Ralph Dean, S-'14
Miller, James L., S-'14
Plant, Thomas W., S-'14
Rasck, Alfred G., S-'14
Stegall, J. Stanley
Stoycoff, Christo M., S-'14
Wells, George M., S-'14
Wilson, William, S-'14

SENIOR CLASS.

Amoros, Gabriel
Apostolides, Emanuel, S-'14
Arnold, Ferris Lyle
Asche, Walter F., W-'15
Baker, Andrew Patrick
Bau, Hyman William
Bedessem, Philip M.
Bennewitz, Anthony Hugo
Blake, George James, W-'15
Bronfeld, Nathan, S-'14
Brown, Otto Richard
Brust, Edmund George
Bucher, Clarence Sylvester, W-'15
Buford, Robert King, S-'14
Carstens, Ernst H. C., W-'15
Chiasson, Placid Nelson
Conn, Hugh Irving
Connolly, Ira

Crosby, Cyrus Ferdinand, W-'15
Cruz, Martin R.
Davis, Amy Reams, S-'14
DeLay, Eli Milton, S-'14
delValle, Manuel F. Lopez
Devereux, Richard Leo
Dittmore, Joseph Ambrose
Donasier, John James, Jr.
Donovan, Michael F. J.
Dornbusch, Franklin Henry
Dougherty, Xenophon Best
Dow, Julian Neal
Duffy, Mark Matthew
Elders, Frank Alvin
Ellis, Raymond Delone
Elmer, Raymond Frank
Feser, Raymond Leonard
Fleischmann, Joseph Andrew
Foster, Robert Leonard
Foulkes, William Alexander
Garrison, Herbert Thomas
Goldberg, Maurice J.
Gunderson, Elmer Alfred
Harris, Elijah George, W-'15
Haworth, Dale Emmett, W-'15
Hehir, Joseph
Hendley, Charles
Hertel, Paul
Holden, Alwin Ambrose, W-'15
Horn, Clinton
Huber, Gale Waite
Jackson, Edward
Jarrell, Robert Earle
Jenks, Isaac Chancy
Johnston, Joseph Andrew
Kell, Chance T.
Kietzer, Edmund Ewald
Knochel, Joseph Martin
Koch, Oswin Fred, W-'15
Konle, Adolph Ralph
Kreml, Otto Anthony
Lanford, Marion Layton
Lownick, Felix Joseph, W-'15
Lyons, George Conner
McChesney, David Henry
McQuaid, Arthur Francis
Montfort, Roy Melloy
Nolan, Eugene P.
Norris, Clarence Oliver
Oakes, Frederick, W-'15
Oldfied, Raleigh Charles
Pacella, Michelangelo
Painter, John Baxter
Parham, John Bernard
Pearce, Franklin Benjamin
Peters, Roy Eliott, W-'15
Pollard, John Dustin
Remington, Sheppard
Resch, Frank J.
Rice, Carroll Wendell
Rivera, Frank Raymond
Robertson, Ira Boyd
Ross, Joseph Clegg
Schaffer, David Nicholas, W-'14
Schallmo, Joseph, E.
Schmidt, Karl Hermann
Schuettler, Arthur Frederick
Shafer, Abe, Jr.
Sondel, Louis Carl
Stapleton, Willard Pierce
Stevens, Stephen
Strupler, Charles Clarence
Thompson, George Alva
Updike, Ernest Hampton, W-'15
Wallingsford, William Jewell
Walsh, Thomas Francis
Walter, John Edgar, W-'15
Washburn, Benson Earl
Wawrzynski, Wenceslaus J.
Weber, Joseph George
Wolin, Benjamin Maurice
Zak, Joseph John

SPECIALS.

Augustus, Benjamin, S-'14
Bailey, Charles Burke
Brunker, H. Victor
Elliott, Mary Hughes
Hooten, Claud Gibson
Jordan, Lawrie Emmett
Kraus, Engelbert Theodore
Landrum, Felton William, S-'14
McGuffie, Charles R.
McLeod, Robert F.
Marsh, Paul Ellis
Miller, John Robinson
Morad, Najech, S-'14
Neale, Vivian J.
Perez, Eduardo Odio
Rattray, John Henry
Smith, Clinton H.
Weir, Major Lee, S-'14
White, Clarence S.

Loyola University

Chicago, Illinois

1452 Students **Conducted by the Jesuits** **127 Professors**

Colleges of Arts and Sciences

St. Ignatius College, West 12th Street and Blue Island Avenue.

Loyola College, Loyola Avenue and Sheridan Road.

Law Department

Ashland Block, Clark and Randolph Streets.

Engineering Department

Loyola Avenue and Sheridan Road.

Medical Department

Fulton and Ada Streets.

Sociology Department

Ashland Block, Clark and Randolph Streets.

Pharmacy Department

Loyola Avenue and Sheridan Road.

In writing for information give name and full address (as above) of the department in which you are interested.

LOYOLA UNIVERSITY

Department *of* Engineering

Bulletin

1914-1915

Address: The Registrar or the Dean
Loyola Avenue and Sheridan Road, Chicago, Illinois
Telephone Rogers Park 620

OFFICERS AND FACULTY

JOHN B. FURAY, S. J., President of the University.
Henry S. Spalding, S. J., Regent.
William H. Cahill, M. A., M. Sc., C. E., Dean.
Paul M. Breen, S. J., Treasurer.
Paul V. Hyland, Lecturer on Architecture and Building Construction.
Edward J. Morgan, S. J., Professor of Analytical Chemistry.
Thomas A. Kelly, S. J., Professor of Physics.
George L. Secord, Ph. D., Professor of Organic Chemistry.
Philip Froebes, S. J., Professor of Physics.
Leo P. Stoesser, B. Sc., Instructor in Mechanical Engineering.
William H. Cahill, A. M., M. Sc., C. E., Professor of Civil Engineering.
Frederic Siedenburg, S. J., Professor of Logic and Economics.
Henry S. Spalding, S. J., Professor of English Literature.
John K. Moore, A. M., Lecturer on Construction.
Arnold D. McMahon, A. M., LL. B., Lecturer on Law of Contracts.
Thomas A. Kelly, S. J., Professor of Mathematics.
G. Leo Pleins, Lecturer on Patents.
Philip Froebes, S. J., Professor of German.
George W. Dailey, Supt. of Wisconsin Division of C. & N. W. R. R., Lecturer on Railroad Maintenance of Way.
Louis Fergussin, M. Sc., E. E., First Vice-President Commonwealth Edison Co., Lecturer on Theory and Practice of Illumination.
W. Abbott, M. Sc., M. E., Lecturer on Mechanical Engineering.
W. H. Finly, First Assistant Chief Engineer of C. & N. W. R. R., Lecturer on Railroad Engineering.

CALENDAR

Second Semester, 1914-1915.

Feb. 1.....Registration day.
Feb. 3.....Instruction begun.
Feb. 12.....Lincoln's Birthday. (Holiday.)
Feb. 22.....Washington's Birthday. (Holiday.)
May 29.....Close of Second Semester.

First Semester, 1915-1916.

Sept. 24.....Entrance and conditional examinations.
Sept. 25.....Registration day.
Sept. 27.....Instruction begun.
Oct. 12.....Columbus Day. (Holiday.)
Nov. 24.....Thanksgiving recess.
Dec. 22.....Christmas vacation.

Second Semester, 1915-1916.

Jan. 31.....Registration day.
Feb. 3.....Instruction begun.
Feb. 12.....Lincoln's Birthday. (Holiday.)
Feb. 22.....Washington's Birthday. (Holiday.)
May 28.....Close of Second Semester.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to the College of Engineering must be at least sixteen years of age, must present satisfactory testimonial of good moral character, and must be qualified in fifteen units of entrance subjects as enumerated below.

NOTE.—A unit represents the equivalent of five prepared recitations a week for one scholastic year in a single subject.

The prescribed units are:

English	3 units
History	1 unit
Elementary Algebra	1 unit
Advanced Algebra	½ unit
Plane Geometry	1 unit
Solid Geometry	½ unit
Elementary Physics	1 unit
Total	8 units

Electives sufficient to make up the required fifteen units may be offered from the following list:

Latin	2 to 4 units
Greek	1 to 3 units
German	2 to 3 units
French	2 to 3 units
English	1 to 2 units
History	1 to 2 units
Higher Algebra	½ unit
Plane Trigonometry	½ unit
Elementary Chemistry	1 unit
Biological Science	1 to 2 units
Manual Training	2 units

Admission may be secured in one of the following ways:

1. BY EXAMINATION.—Entrance examinations will be held at the university in June and September. See Calendar.

2. BY CERTIFICATE.—Graduates from standard high schools or other approved preparatory schools will be admitted on presentation of official certificates exhibiting the number of merits to which the applicant is entitled in each subject of the preparatory course pursued.

3. From Other Colleges.—Students from other institutions, whose entrance requirements and courses are substantially equivalent to those of Loyola University, will, upon presenting proper certificates of good standing and honorable dismissal, be admitted to advanced standing without examination and be given credit for the work done in such institutions.

4. As Special Students.—Persons over 19 years of age, not candidates for degrees, will be admitted as special students, provided they give evidence of preparation for the subjects desired. Such students may become candidates for degrees by passing the examinations prescribed for entrance.

FEES AND EXPENSES.

Matriculation fee	$ 5.00
Tuition	100.00
Diploma fee	10.00
Engineering laboratories, per credit, per semester	2.50
Physical and chemical laboratories, per credit, per semester	2.50
Surveying, field work, per semester	3.00
Summer course in surveying, 2 weeks	12.50
Summer course in surveying, 4 weeks	25.00
Breakage deposit (Chemistry)	10.00

The matriculation fee is paid only once. The tuition fee is payable in two installments: $50.00 on October 1st and $50.00 on February 1st; ten days of grace are allowed. At the end of that time non-payment debars from classes.

No rebate is allowed on tuition paid, but when a student is forced, for valid reasons, to withdraw from college, the balance of the tuition representing that part of the semester for which he is absent may be redeemed in any other department studies within one year from date of withdrawal from the college.

Any balance remaining at the end of each year from the deposit required to defray the expense of breakage in the chemical laboratories will be refunded or credited for the succeeding year at the option of the student.

The college provides no dormitory system for students. Board and rooms may be obtained in the vicinity of the college at reasonable rates.

Further information may be obtained from the Registrar or the Dean of the College of Engineering.

COURSES OF STUDY

The outlines of the courses which follow, and the formulation of their requirements, rest on the well founded theory that successful endeavor in any field of engineering activity depends primarily on thorough theoretical and practical training in the fundamental sciences on which modern engineering practice is based. To give such training as may lead to future usefulness on the part of its students, and to develop in them the power to attack and solve new engineering and scientific problems, is the purpose of the instruction offered in the College of Engineering. The work, therefore, in all the courses outlined, is mostly prescribed, and, because of the correlation and interdependence of the professions for which training is provided, a large proportion of the studies—modified in form and extent to meet the general requirements of the individual courses—are taken in common by all students.

Contemporary engineering practice has assumed many phases of specialization within the rather comprehensive fields of civil, mechanical, electrical, and chemical engineering in the general acceptation of the terms. No one may hope to become expert in more than a very few of the various lines classified under one or another of these broad divisions. Though specialized practice is the order of the day, it is very generally recognized that extreme latitude in the election of special technical studies, in connection with the courses offered, is not conducive to sound engineering education, and tends to defeat the real purpose of engineering training. There are therefore included as elective only a comparatively small number of such special technical subjects as are admittedly valuable in affording desirable general scientific training and promoting immediate average efficiency along broad lines of professional activity.

Note: Courses in Sanitary and Architectural Engineering are in preparation.

Considerable importance is attached to English, German, French, Logic, and Economics, which are included as prescribed studies and designed to accord with the other work of the courses. The requirement in English will not be considered satisfied by the completion of the work of the first year. Instruction will be resumed and continued for as long a period as may seem necessary in the case of any student who shows subsequent inability to express himself clearly, accurately, and effectively.

Frequent visits of inspection, according to prearranged schedule under the guidance of instructors, will be made to convenient manufacturing and industrial establishments, power plants, public works, the sites of important pieces of construction, and other points affording opportunities for stimulating the student's interest and increasing his knowledge. Such visits, besides familiarizing him in a general way with the significance of productive and constructive engineering and lending themselves to his acquirement of exact habits of observation, will afford a basis for written work in which rhetorical and technical instruction may be advantageously combined.

In line with the foregoing, the work in all the courses is identical during the first year, and there is little divergence during the second year. The student is thus afforded an opportunity for self-adjustment, and the danger of premature choice of profession, which is a factor to be reckoned with, is decreased; but he will have become habituated to the scientific methods of thought and procedure so important in the prosecution of his further studies. In the third year the differentiation between the courses, not only as contributory and essential to professional tively advanced and more highly specialized work of the fourth year there is permitted the election of one of a number of groups of studies bearing on some specialty closely related to the course hitherto pursued. All such elections presuppose thorough qualifying preparation, and are subject to the approval of the Dean. The major emphasis, however, is laid on the prescribed studies in all the courses is more specific, and in connection with the comparasuccess, but as desirable elements in culture and in life.

OUTLINE OF COURSES

FRESHMEN YEAR—COMMON TO ALL COURSES.

	First Semester.	Second Semester.
English	3	3
Logic	2	2
German ~~or French~~	4	4
Chemistry	3	3
Drawing and Descriptive Geometry	3	3
Advanced Algebra	3	0
Trigonometry	3	0
Analytical Geometry	0	5
Elementary Surveying	0	3
	21	21

Surveying ..... 2 weeks
Shop work ..... 8 weeks

CIVIL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Drawing	3	2
Geology	3	0
~~Economics~~	2	~~0~~ 2
Advanced Surveying	0	4
~~Technical~~ Mechanics	0	5
	21	~~21~~

Topographic Surveying ..... 4 weeks
Shop or field work ..... 6 weeks

JUNIOR YEAR.

Mechanics of Materials	5	0
Hydraulics	0	5
Materials Laboratory	2	2
Hydraulic Laboratory	0	1
Descriptive Astronomy	3	0
Geodesy	0	3
Roofs and Bridges	5	4
Railway Engineering	4	4
Roads and Pavements	2	0
Economics	0	2
	21	21

Shop, field, or office work ..... 5 or 10 weeks
Railway Surveying (optional) ..... 4 weeks

SENIOR YEAR.

	First Semester.	Second Semester.
Bridge Design	3	0
Water Supply	3	0
Sewerage	3	0
Heat-Power Machinery	3	0
Electrical Machinery	0	3
Mechanical and Electrical Laboratory	1	1
Reinforced Concrete	0	5
Masonry and Foundations	0	2
Engineering Problems	0	2
Economics	3	0
Contracts and Specifications	0	3
Elective	5	5
	21	21

MECHANICAL AND ELECTRICAL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Machine Drawing	3	0
Geology	3	0
Economics	2	0
~~Kinematics~~	0	6
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

JUNIOR YEAR.

Mechanics of Materials	5	0
Hydraulics	0	5
Materials Laboratory	2	1
Hydraulic Laboratory	0	1
Physical Laboratory	2	2
Heat-Power Engineering	3	3
Mechanical Laboratory	1	1
Electrical Machinery	3	3
Machine Design	5	3
Economics	0	2
	21	21

Shop work.....10 weeks

SENIOR YEAR. (MECHANICAL.)

	First Semester.	Second Semester.
Power Plant Design	3	3
Steam Machinery Design	3	0
Gas Machinery Design	0	3
Designing and Drawing	3	3
Mechanical Laboratory	3	3
Electrical Laboratory	3	0
Economics	3	0
Contracts and Specifications	0	3
Elective	3	6
	21	21

SENIOR YEAR. (ELECTRICAL.)

Power Plant Design	3	3
Electrical Engineering	6	6
Mechanical Laboratory	3	0
Electrical Laboratory	3	3
Economics	3	0
Contracts and Specifications	0	3
Elective	3	6
	21	21

CHEMICAL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Qualitative and Quantitative Chemistry	3	3
Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	3
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

JUNIOR YEAR.

Mechanics of Materials	3	0
Hydraulics	0	3
Materials Laboratory	2	1
Hydraulic Laboratory	0	1
Physical Laboratory	2	2

Quantitative Analysis	5	0
Organic Chemistry	5	5
Heat-Power Engineering	3	3
Mechanical Laboratory	1	1
Gas and Oil Analysis	0	3
Economics	0	2
	21	21

Shop or Laboratory Work.....10 weeks

SENIOR YEAR.

Industrial Chemistry	5	5
Physical Chemistry	2	2
Electro-Chemistry	2	2
Electrical Machinery	3	3
Economics	3	0
Contracts and Specifications	0	3
Elective	6	6
	21	21

DESCRIPTION OF COURSES

ENGLISH.

The object of the instruction is to enable the student to express himself clearly, concisely, accurately, and vigorously, special stress being laid on those parts of rhetoric which will be of greatest value to engineering students. The written exercises are designed to accord with the other work of the courses. Students are instructed in the use of the library collections.

1. A course in rhetorical theory and practice, with essays based on the lives of distinguished scientists and visits of inspection.
Freshman; 1st semester; 3 credits.

2. A continuation of course 1, with essays based on assigned technical readings and visits of inspection.
Freshman; 2nd semester; 3 credits.

3. A conditional course supplementing the work of 1 and 2, and consisting wholly of theme work and consultation.

Required only of students who show inability to write clear and correct English. It will be continued until a satisfactory degree of proficiency is attained.

FRENCH AND GERMAN.

All students are required to take one year of work in either French or German. Elementary and advanced courses will be offered in each and the student may elect either. For outlines and descriptions of these courses see Bulletin of the College of Arts and Sciences.

MATHEMATICS.

1. Advanced Algebra.—A brief review of the foundations with graphic representation and of the theory and use of logarithms, followed by a treatment of permutations and combinations, theory of limits, series, undetermined coefficients, determinants, theory of equations, complex numbers.
Freshman; 1st semester; 3 credits.

2. Trigonometry.—The trigonometric functions and their relations; proofs of the principal formulas of plane trigonometry; proofs of formulas and solution of all cases of right and oblique plane triangles; computation of areas.

Proofs of principal formulas of spherical trigonometry; formulas and solutions for right and oblique spherical triangles.
Freshman; 1st semester; 3 credits.
Numerous dependent problems and applications.

3. Analytic Geometry.—Graphic representation; the straight line; conic sections; higher plane curves; the essentials of Solid Analytic Geometry. Considerable problem work is required.

Freshman; 2nd semester; 5 credits.

4. Differential and Integral Calculus.—The direct and inverse operations are carried on in parallel. The fundamental formulas and methods of differentiating and integrating are followed by a geometric treatment of maxima and minima; applications to curves, surfaces, and volumes are considered. Taylor's Theorem and the subject of series in general will be treated in the second semester, together with the applications of the calculus to the engineering sciences. Some attention will be given to the subjects of Hyperbolic and Elliptic functions. Considerable problem work is exacted.

Sophomore; 1st semester, 5 credits; 2nd semester, 3 credits.

5. Differential Equations.—The purpose of the course, which is supplementary to course 4, is to familiarize the student with the types of equations ordinarily encountered in the study of the engineering sciences, and to indicate the principles and methods employed in their solution. The solution of numerous problems will be made a leading feature of this course.

Sophomore; 2nd semester, on completion of course 4; 2 credits.

ASTRONOMY.

1. Descriptive Astronomy.—A study of the fundamental facts and principles of the subject, with observatory practice.

Junior; 1st semester; 3 credits.

GEOLOGY.

1. General Geology.—A presentation of the general principles of geology and their practical applications. The course will be arranged with special reference to the needs of engineering students. Occasional excursions will replace laboratory practice. Three lectures and one laboratory period per week.

Sophomore; 1st semester; 3 credits.

ECONOMICS.

1. Elements of Economics.—A general survey of economic theory and a discussion of present-day economic problems including wages, rent, interest, currency, banking, taxation, tariff, trusts, trades-unionism, socialism. Lectures and classroom discussions.

Sophomore; 2nd semester; 2 credits.

2. Organization and Management.—A study of American industries and a discussion of the methods of organizing, financing, and managing modern commercial institutions. The purpose of the course is to acquaint the student with the application of the general principles of economics to business life. Lectures, discussions, and field work.

Junior; 1st semester; 3 credits.

PHILOSOPHY.

1. Logic.—Formal logic or dialectics; definition, material and formal elements, kinds of reasoning, how to build an argument, analytic and synthetic methods. Material logic: truth, its nature and kinds, certitude, skepticism, cognoscitive faculties, authority, etc.

Freshman; 1st semester; 2 credits.

2. Psychology and Ethics.—Nature and properties of the human soul, cognoscitive faculties, intellect, will, liberty. General ethics, human action, morality, form of human action, divine and human laws. Applied ethics, rights and duties, right of property, socialism, society, law, etc.

PHYSICS.

1. General Physics.—A general course in the subjects of Mechanics and Heat; Light and Sound; Electricity and Magnetism. The methods of the calculus are employed to a considerable degree. Two lecture-demonstrations, two recitations, and two laboratory periods per week.

Sophomore; throughout the year; 5 credits per semester.

2. Physical Measurements.—A laboratory course, supplemented by twelve lectures on the theory and methods of precise thermal and electrical measurements, involving quantitative work in the use of various instruments of precision, and the determination of physical constants. A report of specified form is required on each experiment.

Junior; throughout the year; 2 credits per semester.

3. Practical Photography.—The principles and processes of dry plate photography, including lectures on photographic optics and laboratory work in the exposure and development of dry plates; printing processes, copying, enlarging, and the making of lantern slides.

Elective; second semester; 2 credits.

DRAWING AND DESCRIPTIVE GEOMETRY.

Note.—The freshman work in drawing and descriptive geometry is given as a combined course, but, in the cases of special students or of those admitted to advanced standing, separate courses may be given as follows:

1. Elements of Drawing.—Freehand lettering; sketching and dimensioning; geometrical construction; orthographic projection and isometric drawing; working drawings, including conventions, standards, etc.; tracing and reproductive processes. Notes and lectures on drafting room methods.

Freshmen; 1st semester; 3 credits.

2. Descriptive Geometry.—The descriptive geometry of points, lines, planes, surfaces, and solids. Tangencies, intersections, and developments. Shades and shadows and the principles of linear perspective. One lecture or recitation and two drafting periods a week.

Freshmen; 2nd semester; 3 credits.

MECHANICS AND HYDRAULICS.

1. Technical Mechanics.—The principles of Statics, Kinematics, and Kinetics, with technical applications. Analytic and graphic methods are used concurrently in the solution of problems.

Sophomore; 2nd semester; 5 credits.

2. Mechanics of Materials.—A study of the more important materials of construction, their manufacture, properties, and structural uses, and the theory of resistance to stress and deformation with applications to engineering design. Lectures and recitations.

Junior; 1st semester; 5 credits.

2a. Mechanics of Materials.—A briefer course than 2; arranged to meet the requirements in Chemical Engineering.

Junior; 1st semester; 3 credits.

3. Advanced Mechanics.—An advanced course supplementary to 2, and devoted to the treatment of such special topics as dynamical stability, the mathematical theory of elasticity, internal work and its derivatives, the theorem of least work, linear arches and curved beams. Lectures, problems, and applications.

Senior elective; 1st semester; 3 credits.

4. Materials Laboratory.—The laboratory practice will be adapted to the requirements of the individual courses and will include the various standard tests of the more important materials of construction. The work will be supplemented by lectures on the technique of testing, collateral reading, and reports carefully prepared according to a prescribed form.

Junior; throughout the year; 2 credits per semester.

4a. Materials Laboratory.—An advanced laboratory course, in continuation of the work of 4, devoted to testing and special investigations of materials of construction. Hours and nature of experimental work to be assigned in conference with the instructors concerned.

Senior elective; 1 to 3 credits per semester.

5. Hydraulics.—The theory of fluid pressure and equilibrium; the flow of water through orifices, weirs, tubes, pipes and channels, the theory of hydraulic measurements; hydraulic motors and machinery; naval hydromechanics. Lectures and recitations.

Junior; 2nd semester; 5 credits.

5a. A briefer course than 5, adapted to meet the requirement in Chemical Engineering.

Junior; 2nd semester; 3 credits.

6. Hydraulic Laboratory.—An experimental course to accompany 5, including logarithmic plotting, experiments with weirs, orifices, pipes, meters and nozzles; the testing of hydraulic machinery.

Junior; 2nd semester; 1 credit.

6a. Hydraulic Laboratory.—An advanced course in experimental hydraulics, including capacity and efficiency tests of hydraulic machinery. The hours of work will be by appointment, and some latitude will be allowed as to the nature of the experimentation.

Senior elective; either semester; 1 to 3 credits.

CIVIL ENGINEERING.

1. Elementary Surveying.—Lectures, recitations, field and office work covering the principles, uses, and adjustments of the engineer's level and transit, and the uses of the steel tape; topographic surveying with transit and stadia.

Freshmen; 2nd semester; 3 credits.

2. Advanced Surveying.—The application of the fundamental operations to city, land, mine, and hydrographic surveying; the use of the plane table and sextant; precise leveling and triangulation; including the measurement of base lines and angles; the determination of azimuth by solar observation. Lectures, recitations, field and office work.

Sophomore; 2nd semester; 4 credits.

3. Geodesy.—The principles of practical astronomy and their application in the determination of latitude, longitude, time, and azimuth with the engineer's transit and sextant. Methods of conducting geodetic surveys, and the application of the method of least squares to the adjustment of observations. The figure of the earth.

Junior; 2nd semester; 3 credits.

4. Summer Surveying.—The Summer courses in surveying are given at the close of the school year in June and are of a practical nature. The student will spend ten hours a day in the field or office in the performance of the various duties incident to the work of the surveyor. The courses in Elementary and Topographic Surveying are prescribed. The course in Railway Surveying and Location is optional. The periods allotted to these

courses are two weeks for Elementary Surveying, and four weeks each for Topographic and Railway Surveying.

5. Topographic Drawing.—The conventional methods of representing topography and the platting of the results of surveys.

Sophomore; 2nd semester; 2 credits.

6. Construction Drawing.—Stereotomy, dams, piers, arches, trestles, culverts, etc. Applications of Descriptive Geometry to engineering construction.

Sophomore; 1st semester; 3 credits.

7. Railway Engineering.—Lectures, recitations, field, and office work dealing with the subjects of railway location and construction. The theory of simple, compound, and transition curves, cross-overs, frogs and switches, turnouts, etc. Cross sectioning, the computation of cut, fill and haul; road bed construction, including ballast, track, culverts, trestles, etc. Estimates and costs.

The economics of location embracing a treatment of such topics as train resistance, the influence of grade, curvature, rise and fall; rolling stock and motive power; yards, stations, and terminals; street railways.

Junior; throughout the year; 4 credits per semester.

8. Railway Engineering.—A continuation of course 7, including a discussion of the economics of construction, a study of organization and management, maintenance of way, etc.

Senior elective; throughout the year; 2 credits per semester.

9. Railway Designs.—A conference and drawing room course in the proportioning of culverts and waterways, and the design of track layouts, yards, terminals, bridge masonry, and other railway structures.

Senior elective; 2nd semester; 3 credits.

10. Roads and Pavements.—The location, construction, and maintenance of roads, and the construction and maintenance of city streets and pavements, combined with a study of the materials used. Lectures, recitations, and collateral reading; visits of inspection and reports.

Junior; 1st semester; 2 credits.

11. Roofs and Bridges.—The analytic and graphic investigation of stresses in framed structures under various conditions of loading. Structural details. The design of a metal roof truss and of a plate girder, including general and detail drawings, bills of material, weights, and costs.

Junior; throughout the year; 1st semester; 5 credits; 2nd semester, 4 credits.

12. Bridge Design.—A continuation of course 11, involving the drafting room application of its principles to the design of simple riveted and

pin-connected truss spans, following the practice of leading bridge companies.

Senior; 1st semester; 3 credits.

13. Higher Structures.—A study of continuous, cantilever, suspension, and arch bridges; statically indeterminate structures. Lectures, computations, and drafting room work.

Senior elective; throughout the year; 3 credits per semester.

14. Steel Buildings.—The principles of construction of mill and high steel-skeleton buildings; computation of stresses and design.

Senior elective; either semester; 2 credits.

15. Reinforced Concrete.—The theory and design of beams, slabs, columns, retaining walls, dams, and other structures, and a critical study of the design and structural features of reinforced concrete arch types. The course is concluded by the complete design, including drawings, of a reinforced concrete arch.

Senior; 2nd semester; 5 credits.

16. Masonry and Foundations.—The course is given by lectures, recitations, collateral reading, and visits of inspection. Among the subjects treated are the materials of masonry; the construction of bridge piers, abutments, dams, retaining walls, etc.; ordinary, pile, and subaqueous foundations.

Senior; 2nd semester; 2 credits.

17. Water Supply.—The collection, purification, and distribution of water supplies for domestic and other purposes.

Senior; 1st semester; 3 credits.

18. Sewerage.—The collection, treatment, and disposal of sewage. Lectures, recitations, and inspection trips.

Senior; 2nd semester; 3 credits.

19. Sanitary Engineering.—A continuation of 18 and 19, the work being devoted principally to problems and designing related to water supply, sewer systems, and sewage disposal plants.

Senior elective; 2nd semester; 5 credits.

20. Hydraulic Engineering.—The application of hydraulic theory and principles to the investigation and development of water power; irrigation, river and harbor improvement; drainage and canalization. The design of hydraulic works, plants, and appliances.

Senior elective; throughout the year; 3 credits per semester.

21. Engineering Problems.—The application of fundamental principles to the investigation and solution of practical problems.

Senior; 2nd semester; 2 credits.

22. Contracts and Specifications.—The elements of business law and a survey of the law of contracts as applied to engineering work. A study of general and special clauses used in the various kinds of engineering specifications. Practice in the preparation of contracts and specifications.

Senior; 2nd semester; 3 credits.

MECHANICAL ENGINEERING.

1. Machine Drawing.—A continuation of Drawings 1 and 2, and the application of their principles to machine drawing and empirical design. Sketching and detailing machine elements from model and copy; the making and use of standard data sheets; detail assembly drawings of complete machines. The work is designed to familiarize the student with commercial drafting room practice, and is of distinctly vocational character.

Sophomore; 1st semester; 3 credits.

2. Kinematics of Machinery.—Lectures and recitations on the theory of mechanisms, instant centers, cams, gears, linkage, velocity and acceleration diagrams, etc.

Sophomore; 2nd semester; 3 credits.

3. Kinematic Drawing.—The graphic application of the principles of course 2. A series of separate problems of graded complexity will be assigned to each student.

Sophomore; 2nd semester; 3 credits.

3a. Kinematics.—A combined lecture, recitation, and drafting room course briefer than 2 and 3, and arranged to satisfy the requirement in the principles of mechanism for chemical engineering students.

Sophomore; 2nd semester; 3 credits.

4. Lectures, recitation, and drafting room exercises covering the application of the principles of Drawing, Kinematics, and Mechanics to the proportioning of machine elements and the designs of complete machines.

Junior; throughout the year: 1st semester, 5 credits; 2nd semester, 3 credits.

5. Heat-Power Engineering.—Lectures and recitations on the thermodynamics of gases and vapors as applied to heat engines; a study of fuels and the principles of combustion; boilers, engines, and auxiliaries. The indicator diagram. A detailed analysis of efficiencies and economies of various types of steam engines, gas engines, and turbines; valves and valve gears.

Junior; throughout the year; 3 credits per semester.

5a. Heat-Power Machinery.—A lecture and recitation course for civil engineering students, designed to impart a general knowledge of the structural features and operating characteristics of boilers and producers, steam

and gas engines and auxiliaries, pumping, hoisting, traction, and other machinery. The course is devoid of much technical detail.

Senior; 1st semester; 3 credits.

6. Mechanical Laboratory.—Introductory experimental work in the testing and calibration of gauges, indicators, integrating instruments, etc.; power measurements; fuel and gas analysis; oil testing; the determination of engine efficiencies and the testing of auxiliary apparatus.

Junior; throughout the year; 1 credit per semester.

6a. Mechanical Laboratory.—A continuation of course 6, the work including the testing and determination of efficiencies of steam engines, boilers, gas and oil engines, pumps, air compressors, refrigerating machinery, etc.

Senior; throughout the year; 3 credits per semester.

6b. Mechanical Laboratory.—An advanced experimental course open only to students who have completed the prescribed laboratory courses. Hours and nature of the work to be arranged.

Elective; either semester; 1 to 3 credits.

Note.—The work in experimental engineering is varied according to the courses. Each experiment will be followed by a carefully prepared report of specified form.

7. Power Plant Design.—A continuation of course 5. Lectures, recitations, and computations dealing with the types and principles of boilers; multiple expansion engines, and their auxiliaries and dependencies; gas engines; steam turbines, refrigerating machinery, and air compressors. The selection of elements and their combination in power plants.

Senior; throughout the year; 3 credits per semester.

8. Steam Machinery Design.—A study of types and proportions of steam engines; the indicator card; entropy—temperature and crank effort diagrams; the design of such details as valve gears, governors, and flywheels; the balancing of engines.

Senior; 1st semester; 3 credits.

9. Gas Machinery Design.—A study of modern gas engines and producers, and the designing of important details of internal combustion engines.

Senior; 2nd semester; 3 credits.

10. Designing and Drawing.—A drafting room course paralleling the work of 8 and 9. This course must be accompanied, or preceded by 8 and 9.

Senior; throughout the year; 3 credits per semester.

11. Steam Boilers.—A study of steam boiler types, fuels and furnaces; steam boiler computations, and the design of boiler details and accessories.
Senior elective; 1st semester; 3 credits.

12. Steam Turbines.—A general discussion of the types, principles, and economic and structural features of steam turbines; steam turbine calculations.
Senior elective; 2nd semester; 3 credits.

13. Compressed Air.—A study of the properties of air, the principles of air compressors, and the applications of compressed air.
Elective; 2nd semester; 2 credits.

14. Heating and Ventilation.—The fundamental principles of the subject, and their application to the design, construction, and installation of heating and ventilating systems.
Senior elective; 2nd semester; 2 credits.

15. Mechanical Refrigeration.—A study of the principles and methods involved in the artificial production of low temperatures, and a survey of the design, construction, and operation of refrigerating machinery and refrigerating systems.
Senior elective; 2nd semester; 2 credits.

ELECTRICAL ENGINEERING.

1. Electrical Machinery.—Lectures, recitations, and laboratory work dealing with the history of the subject, and the laws and properties of electric and magnetic circuits; electrical measurements; the theory construction and operation of direct and alternating current machinery.
Junior; throughout the year; 3 credits per semester.

1a. Electrical Machinery.—A briefer course than 1, arranged to meet the needs of civil engineering students.
Senior; 2nd semester; 3 credits.

2. Electrical Engineering.—Lectures, recitations, and computations on the theory and characteristics of electrical machinery, dealing in detail with the laws and properties of electric and magnetic circuits; direct and alternating current phenomena; transmission lines; generators, motors, transformers, converters, etc.
Senior; throughout the year; 6 credits per semester.

3. Electrical Laboratory.—Practice in the electrical laboratories will be continuous throughout the junior and senior years. The work will be of such nature as to meet the requirements of the individual courses. Opportunities for laboratory work of an advanced character will be afforded

to those who have completed the prescribed courses. The regular work will include the testing of instruments, generators, motors, transformers, converters, storage batteries, etc.; it will be supplemented by occasional lectures. A carefully prepared report on each experiment is required.

Throughout the year; junior, 1 credit per semester; senior, 3 credits per semester.

4. Telephone Engineering.—The theory and operation of telephonic apparatus and the application of the principles of electrical engineering to the design, construction, and maintenance of transmission lines, and to the investigation of problems in telephone engineering.

Senior elective; 1st semester; 3 credits.

5. Electric Railways.—The application of the principles of electrical engineering to the construction, operation, and equipment of various types of electric railway systems. The dynamics of train movement, and the plotting of speed-time curves, railway load curves, etc.; location and financing; cost of construction and operation.

Senior elective; 2nd semester; 3 credits.

6. Transmission and Distribution of Electric Energy.—A discussion of typical systems of power generation, transmission, and distribution for lighting, traction, and industrial purposes, and their design, construction, operation, and maintenance with some reference to costs and rates.

Senior elective; 2nd semester; 3 credits.

7. Design of Electrical Machinery.—The applications of fundamental principles and of considerations of commercial practice to the design of various classes of direct and alternating current machinery.

Senior elective; 2nd semester; 3 credits.

8. Illumination and Photometry.—The theory of illumination and a discussion of illuminating apparatus and devices; the design, construction, and operation of electric lighting systems and the photometry of lamps.

Senior elective; 2nd semester; 3 credits.

CHEMISTRY AND CHEMICAL ENGINEERING.

1. General Chemistry.—Entrance Chemistry, if offered, will not be accepted as the equivalent of this course.

Two lecture-demonstrations, one recitation, and one laboratory period, covering the fundamental principles of the science, the chemistry of the non-metals, and metals and the elements of qualitative chemical analysis.

Freshmen; throughout the year; 3 credits.

2. Qualitative Analysis.—The laboratory work will be varied to some extent according to the course pursued and will include analyses of alloys, rocks, minerals, slags, mattes, and other compounds or mixtures. One lecture or recitation and three laboratory periods per week.

Sophomore; 2nd semester; 3 credits.

3. Quantitative Analysis.—An introductory course consisting of one lecture and three laboratory periods per week devoted to volumetric and gravimetric determinations, including practice in the calibration of flasks and burettes, acidimetry and alkalimetry, chlorimetry, and the analysis of simple compounds and ores.

Sophomore; 2nd semester; 3 credits.

4. Quantitative Analysis.—A continuation of course 3, and of a more advanced nature. Instruction will be given gravimetric, volumetric, and electrolytic methods of analysis. The work will include the analyses of iron and steel, slags, silivates, paints, lubricants, ores, etc. One lecture, laboratory conferences and the equivalent of five laboratory periods weekly.

Junior; 1st semester; 5 credits.

5. Gas and Oil Analysis.—A laboratory course with weekly conferences, devoted to practice in the calorimetry and typical methods of analysis of gases and oils.

Junior; 2nd semester; 3 credits.

6. Water Analysis.—Lectures and laboratory practice in the examination of water with reference to its use for domestic and industrial purposes.

Elective; 1st semester; 3 credits.

7. Organic Chemistry.—Two lectures and one recitation on the general principles and theories of organic chemistry and the methods of preparation and characteristic reactions of organic compounds with a corresponding laboratory course of three periods per week. A limited amount of work along special lines or organic chemistry may be elected.

Junior; throughout the year; 5 credits.

8. Advanced Organic Chemistry.—A conference and laboratory course dealing with the preparation and reactions of special classes of organic compounds and including ultimate organic analysis. The work may be varied, in a limited degree, according to the option of the student.

Senior elective; throughout the year; 3 to 4 credits per semester.

9. Industrial Chemistry.—The course is given by means of lectures, recitations, laboratory practice, and visits of inspection, and deals with the chemical processes, apparatus, and operations involved in various chemical

industries, and with the analysis of raw materials and products. Attention is given, as far as may be, to estimates of apparatus and plants for particular purposes and to costs and management.

Senior; throughout the year; 5 credits per semester.

10. Physical Chemistry.—The course is arranged to embrace a systematic presentation, with experimental illustration, of the more important principles of theoretical chemistry, stress being laid on such points as the theory of solution, reaction velocity, catalysis, chemical equilibrium, and the applications of the principles of physical chemistry to industrial practice. The course is accompanied by laboratory work in the determination of molecular weights and physico-chemical measurements.

Senior; throughout the year; 2 credits per semester.

11. Electro-Chemistry.—Lectures, recitations, and laboratory work partly in continuation of course 11, dealing with the principles of the subject and their application to chemical industries. The laboratory practice includes electro-chemical measurements and the electrolysis of chemical compounds.

Senior; throughout the year; 2 credits per semester.

12. Microchemistry.—Lectures and laboratory work on the use of the microscope and its accessories, and the application of microscopic apparatus and methods to chemical investigation and analysis.

Senior elective; 2nd semester; 3 credits.

13. Assaying.—Lectures and laboratory work in the crushing, sampling, and assaying of gold, silver, copper, lead, and zinc ores, and the sampling and assaying of bullion.

Elective; 1st semester; 3 credits.

14. Metallurgy of Iron and Steel.—A discussion of the properties and principles of production and manufacture of iron and steel, with laboratory practice in special analytical methods applicable to iron and steel determinations. The work is supplemented by visits of inspection and reports.

Senior; 1st semester; 2 or 3 credits.

15. General Metallurgy.—A course treating of metallurgical processes and the principles of combustion and thermochemistry, pyrometry, fuels, fluxes, refractories, furnaces and artificial draft and blast.

Senior elective; 1st semester; 2 credits.

16. Metallurgical Problems.—The solution of a number of selected problems relating to the principles utilized in practical metallurgy.

Senior elective; 1st semester; 1 to 2 credits.

17. Metallurgy of Non-ferrous Metals.—A course of lectures dealing in considerable detail with the metallurgy of copper, lead, silver, gold, zinc, and aluminum, and more briefly with nickel, cobalt, arsenic, antimony, tin, mercury, bismuth, etc. The physical and chemical properties of ores and the various processes employed and principles involved in reduction and refinement are discussed.

Senior elective; 2nd semester; 3 credits.

18. Metallurgical Laboratory.—The laboratory practice is closely related to the class room exercises. It includes special analytical methods applicable to iron and steel, fuel, fluxes, and slags. Practice in pyrometry and the measurement of blast velocity, and the analysis of flue gas by special apparatus. Roasting, smelting, leaching and amalgamating processes as applied to the reduction of the ores of gold, silver, copper and lead.

Senior; 2nd semester; 3 to 5 credits.

19. Chemical Engineering.—A study of the types of apparatus and operations involved in chemical manufacture, the design of chemical plants, and the consideration of the chemical resistance of materials suitable for their construction.

Senior elective; 2nd semester; 3 to 5 credits.

EXAMINATIONS

Examinations are held semi-annually at the end of each semester. The work done during the semester, as well as the examinations, is considered in the grading of students. The results of the examinations are expressed on the basis of 100.

70 is required for passing; 60-70 indicates a condition; below 60 shows failure. Regularity of attendance at lectures and laboratory, and faithfulness in the performance of daily work are of as much weight in determining the standing of students in their classes as are the examinations.

Conditions.—Conditioned students must remove such conditions at the examinations given for that purpose during the following semester. Failing in this the student is obliged to discontinue the subject in which he is conditioned and to repeat it during the next semester.

For a special examination of this kind a fee of $1.00 is charged.

DEGREES.

The degree of Bachelor of Science in Civil Engineering, Mechanical Engineering, Electrical Engineering, and Chemical Engineering will be conferred on students who satisfactorily complete the corresponding courses.

REGISTER OF STUDENTS—1914-1915

CANDIDATES FOR DEGREE.

SOPHOMORE

Ashenden, James Frederic
Casey, J. Raymond
Eifler, Frederic Charles
Keenan, Francis Joseph
McWilliams, James Edward

FRESHMEN

Bigley, Lincoln
Corcoran, Stephen
Gallarza, Maximilian
Hoeschen, Joseph A.
Kohnen, Joseph
Mlodzikowski, Stanley
Palkovic, Nicolas
Pohlman, Edward Charles
Passow, Lawrence Fullgraff
Schoen, John
Walsh, Walter Francis
Weber, John Edward

SPECIAL STUDENTS IN CIVIL ENGINEERING.

Knisely, Richard
Lynch, J. Raymond

STUDENTS IN MECHANICAL AND ARCHITECTURAL DRAWING.

Bouscaren, William
Braun, Charles
Carroll, William
Cardwell, John
Duffy, Joseph
Duffy, Thomas
Fay, Owen
Hill, Edward
Hoffman, George
Kuhn, Alphonse
Lahey, William
Lambert, Francis
Lorenz, Raymond
Loftus, Edmund
Madden, John
Maher, Leonard
Mahoney, James
Moran, Charles
Morgan, Anthony
Mullaney, Paul
McNichols, Francis
McCahill, Eugene
McKenna, Phil
O'Connell, Tom
O'Donnell, John
Quinlan, Francis
Siegler, George
Schuster, Irving
Sullivan, Louis
Temple, Tom
Vanasek, John
Yegge, Harold

SPECIAL STUDENTS IN COLLEGE PHYSICS.

Beatty, Sidney L.
Byrne, Robert Joseph
Fricot, David
Kalvelage, Edward Bernard
Kopprasch, William
Kirchoff, John
Leon, Harry George
Machowiach, Felix Alexander
Makar, Ignatius
Malouf, Charles
McDonnell, Joseph Owen
McLaughlin, Martin Eugene
Moran, William Michael
Sarpalius, John
Sotirakos, Spiros
Wachlin. Edwin
Watry, Oliver Joseph
Whamond, Robert

Loyola University

School of Sociology

Bulletin No. 4 August, 1915

Announcements 1915-1916

Register 1914-1915

Ashland Block—Sixth Floor
Clark and Randolph Streets
Chicago

CALENDAR FOR YEAR 1915-1916.

September 29, Wednesday.....Registration Begins

October 4, Monday.....First Session Begins

October 12, Tuesday.....Holiday—Columbus' Birthday

November 25, Thursday.....Holiday—Thanksgiving

December 11, Saturday.....First Session Ends

January 10, Monday.....Second Session Begins

February 12, Saturday.....Holiday—Lincoln's Birthday

February 22, Tuesday.....Holiday—Washington's Birthday

March 18, Saturday.....Second Session Ends

March 27, Monday.....Third Session Begins

April 21, Friday.....Holiday—Good Friday

April 24, Monday.....Holiday—Easter Monday

June 3, Saturday.....End of School Year

Officers and Faculty

Rev. JOHN B. FURAY, S.J.,
President of University.

Rev. FREDERIC SIEDENBURG, S.J.,
Dean and Lecturer on Sociology.

Rev. Henry S. Spalding, S.J.,
lecturer on history of social reform.

Rev. Patrick A. Mullens, S.J.,
lecturer on logic.

Rev. Thomas V. Shannon, S.T.L.,
lecturer on economics.

Alfred De Roulet, A.M., M.Sc., M.D.,
lecturer on social pathology.

James Fitzgerald, A.M.,
lecturer on economics.

Philip A. Grau, A.M., LL.M.,
lecturer on civics and law.

Lenora Z. Meder, LL.B.,
supervisor of field work.

Amelia Sears,
lecturer on social investigation.

Rose J. McHugh, Ph.B.,
lecturer on family rehabilitation.

M. E. McNally,
registrar and librarian.

Special Lecturers

The following gave lectures during 1914-1915, and many of them have consented to lecture during 1915-1916:

HENRY A. ALLEN,
CHIEF ENGINEER OF WASTE DISPOSAL, CHICAGO.

W. W. ARMSTRONG, M.D.,
CHIEF, BUREAU OF FOOD INSPECTION, DEPARTMENT OF HEALTH.

CHARLES B. BALL,
CHIEF, BUREAU OF SANITATION, DEPARTMENT OF HEALTH.

WILLIAM L. BODINE,
SUPERINTENDENT, COMPULSORY EDUCATION, CHICAGO.

WILLIAM J. BOGAN, Ph.B.,
PRINCIPAL, THE LANE TECHNICAL SCHOOL, CHICAGO.

HON. EDWARD O. BROWN,
CHIEF JUSTICE, APPELLATE COURT, CHICAGO.

CARL C. CARSTENS,
MASSACHUSETTS SOCIETY FOR CHILDREN, BOSTON, MASS.

THOMAS J. CLAFFY,
ASSISTANT CHIEF, BUREAU OF SANITATION, CHICAGO.

WALTER F. COOLING,
ATTORNEY AT LAW, CHICAGO.

WILLIAM T. CROSS,
SECRETARY OF THE NATIONAL CONFERENCE OF CHARITIES AND CORRECTION.

ANNE F. DAVIS,
DIRECTOR, BUREAU OF VOCATIONAL SUPERVISION, CHICAGO.

WILLIAM A. EVANS, M.D.,
FORMER COMMISSIONER OF HEALTH, CHICAGO.

BERNARD FLEXNER,
ATTORNEY AT LAW, CHICAGO.

EDNA L. FOLEY, R.N.,
SUPERINTENDENT, VISITING NURSE ASSOCIATION.

HON. CHARLES N. GOODNOW,
JUDGE, MORALS COURT, CHICAGO.

ALICE HAMILTON, M.D.,
UNITED STATES DEPARTMENT OF LABOR, WASHINGTON, D. C.

WILLIAM HEALY, M.D.,
DIRECTOR PSYCHOPATHIC INSTITUTE, JUVENILE COURT.

E. V. HILL, M.D.,
CHIEF, VENTILATION DIVISION, DEPARTMENT OF HEALTH.

WILLIAM J. HICKSON, M. D.
DIRECTOR PSYCHOPATHIC LABORATORY, MUNICIPAL COURT.

WILLIAM I. HULL,
PROFESSOR OF INTERNATIONAL LAW, SWARTHMORE COLLEGE.

J. L. JACOBS,
EFFICIENCY DIVISION, CIVIL SERVICE COMMISSION, CHICAGO.

ALEXANDER JOHNSON,
SCHOOL FOR FEEBLE-MINDED, VINELAND, NEW JERSEY.

H. O. JONES, M.D.,
CHIEF, CHILD WELFARE DIVISION, DEPARTMENT OF HEALTH.

REV. FRANCIS C. KELLEY, D.D.,
PRESIDENT, CATHOLIC CHURCH EXTENSION SOCIETY OF UNITED STATES.

HELEN W. KELLY, R.N.,
SUPERVISOR OF NURSES, DEPARTMENT OF HEALTH.

DENNIS F. KELLY,
GENERAL MANAGER, MANDEL BROS., CHICAGO.

SHERMAN C. KINGSLEY,
DIRECTOR ELIZABETH MCCORMICK MEMORIAL FUND, CHICAGO.

ALFRED W. KLIEFOTH,
SECRETARY, AMERICAN PEACE FEDERATION.

EUGENE T. LIES,
SUPERINTENDENT, UNITED CHARITIES, CHICAGO.

MARGARET M. LONG,
HEAD, PROBATION DEPARTMENT, JUVENILE COURT.

OWEN R. LOVEJOY,
SECRETARY, NATIONAL CHILD LABOR COMMITTEE, NEW YORK.

ANTHONY MATRÉ, K.S.G.,
SECRETARY, AMERICAN FEDERATION OF CATHOLIC SOCIETIES.

WILLIAM K. MURRAY, M.D.,
CHIEF, BUREAU OF HOSPITALS AND MUNICIPAL LODGINGS.

ANNA E. NICHOLES,
SECRETARY, CIVIL SERVICE COMMISSION, COOK COUNTY.

Rev. P. J. O'Callaghan, C.P.S.,
RECTOR PAULIST CHURCH, CHICAGO.

J. J. O'Connor,
CENTRAL DIRECTOR, AMERICAN RED CROSS SOCIETY.

E. R. Pritchard,
SECRETARY, DEPARTMENT OF HEALTH.

Hon. Joseph P. Rafferty,
JUDGE, MUNICIPAL COURT, COOK COUNTY.

Wilfred S. Reynolds,
SUPERINTENDENT, ILLINOIS CHILDREN'S HOME AND AID SOCIETY.

Rev. John A. Ryan, D.D.,
PROFESSOR OF SOCIOLOGY, ST. PAUL SEMINARY, ST. PAUL, MINN.

Theodore B. Sachs, M.D.,
PRESIDENT, MUNICIPAL TUBERCULOSIS SANITARIUM.

Hon. Kickham Scanlan,
JUSTICE OF APPELLATE COURT, CHICAGO.

Heman Spalding, M. D.,
CHIEF, BUREAU OF MEDICAL INSPECTION, DEPARTMENT OF HEALTH.

Henry W. Stewart,
ASSOCIATION OF COMMERCE, CHICAGO.

Elnora E. Thomson, R.N.,
SUPERINTENDENT, ILLINOIS MENTAL HYGIENE SOCIETY.

Richard H. Tierney, S.J.,
EDITOR "AMERICA," NEW YORK CITY.

John F. Tyrrell,
ATTORNEY-AT-LAW, CHICAGO.

Hon. Frank P. Walsh,
CHAIRMAN FEDERAL INDUSTRIAL COMMISSION, WASHINGTON, D. C.

Mary C. Wheeler, R.N.,
SUPERINTENDENT, ILLINOIS TRAINING SCHOOL, CHICAGO.

George B. Young, M.D.,
COMMISSIONER OF HEALTH, CHICAGO.

Genaral Information

PURPOSE.

Besides giving a thorough course in the basic principles of sociology the purpose of this school is also to give fundamental and practical courses in civics and social economy, as a preparation for social and charity work of all kinds.

HISTORY.

An evening class in Philosophy and Sociology was formed in October, 1902, and since that time has been regularly conducted in connection with the Law Department, meeting Friday evenings from 6:30 to 9:00 P. M., from September to May. Its object was to furnish college graduates, special students and professional men an opportunity to review their mental philosophy and to make a more thorough study of social questions after some experience in practical life. Those who were not college graduates were admitted to the class if their tastes and previous attainments qualified them to profit by it.

In September, 1912, the Loyola University Lecture Bureau was organized to give extension lectures of a popular nature on social subjects. During the year over one hundred addresses were given by a staff of special lecturers in various parts of the city and the surrounding territory. The interest which these lectures aroused paved the way for systematic courses from October, 1913, to April, 1914. In these courses one hundred and sixty lectures were given, embracing General Economics and Sociology, Social and Legal Ethics, and Social and Industrial Reorganization. Some of the courses were so well attended that the Law School lecture room could not accommodate the attendance, and Schiller Hall was secured. In September, 1914, a permanent school of sociology was established.

LOCATION.

Owing to its location in the heart of a great city, the school is enabled to give an ideal course which combines theory and practice. As many of the lecturers are engaged in social work, they bring to the class room that experience which is necessary to illustrate the principles and that interest which daily contact with social service inspires. The school co-operates with various public and private civic and social organizations.

THE SCHOOL YEAR.

The Curriculum is of two academic years, so arranged that either one or two years may be taken without unnecessary repetitions or want of continuity.

The school year is divided into three sessions, each of ten weeks duration, beginning the first week in October, and ending the first week in June, with an extended mid-winter vacation. Students are admitted at the beginning of any session. Day courses are conducted every day (except Saturday) from 4:00 to 6:00 P. M. Evening courses, every Friday, from 6:30 to 9:00 P. M.

ENTRANCE REQUIREMENTS.

All candidates for admission must be over eighteen years of age, and must have a four years high school education or its equivalent. To this must be added two or more years of recognized college work or practical experience of a nature equivalent to the same. Satisfactory evidence of good character and earnest study must likewise be presented with registration data.

REGULAR STUDENTS.

Regular students are those who take all the day courses and who are candidates for a B. S. degree or a Certificate in Social Economy, according to their previous qualifications and college credits. Each student must, during each week, give ten hours to lectures and fifteen hours to field work. The course is completed in two years.

SPECIAL STUDENTS.

Special students are those who take any of the courses offered provided that not less than four lectures per week are attended. College credits towards a degree or a Certificate in Social Economy will be given for these courses provided the attendance has been regular, and a satisfactory thesis is presented.

SCHOLARSHIPS.

Three scholarships for the regular course and five scholarships for the special course are offered for 1915-1916, to students who have college degrees or have exceptional scholarship records. These scholarships are at the disposition of the faculty, and provide free tuition only.

METHODS OF INSTRUCTION.

The methods used are those of lectures at the school, private research, and practical work under the direction of well established social agencies, with expert supervision. Charts, Stereopticon views and Moving Pictures are also used to advantage.

FIELD WORK.

This practice work is of equal importance with the lectures, and hence fifteen hours per week are required from all regular students. The latter are assigned as apprentices to study methods and the technique of treatment, to some of the leading public and private civic and social institutions.

VISITS OF INSPECTION.

At stated intervals visits of inspection are made to the different institutions with whose work the student should be acquainted, such as the Juvenile and Morals Courts, the House of Correction, the Good Shepherd Convent, St. Mary's Industrial and Training School, St. Charles School for Boys, Geneva School for Girls, etc

LIBRARY.

A select library of over one thousand books and pamphlets, treating every phase of sociological problems, will be at the disposal of special as well as regular students. The Chicago Public Library and the Crerar Library are less than four blocks from the school.

EXPENSES.

For regular students the matriculation fee will be $5.00, and the tuition for each term $20.00. For special students the tuition will be $12.00 for each course of fifty-four lectures, the number of hours required for a major credit.

Tuition is payable in advance at the beginning of each session. Students who fail to obtain a card from the registrar within ten days after the opening of the session will be debarred from the privilege of the classes.

Fees are in no case refunded, but students who have paid tuition and have become unable through sickness or any other unavoidable cause, to attend, will be credited the amount on any subsequent session which they may attend.

Students will be permitted to take special examinations for the removal of conditions, but will be required to pay a fee of $5.00 for such examination.

All financial obligations must be met before examinations may be taken or diplomas or certificates conferred.

For the benefit of out-of-town students, the following estimates are submitted:

	Low.	Average.	High.
Tuition	$ 60.00	$ 60.00	$ 60.00
Board and room	120.00	160.00	180.00
Laundry	15.00	20.00	30.00
Books and stationery	15.00	20.00	30.00
Incidentals	40.00	60.00	80.00

Students may apply to the Registrar for information and direction as to desirable board and lodging.

RESIDENCE IN INSTITUTIONS.

Students of limited means and vigorous health might arrange through the registrar to find residence in one or other of the social institutions of the city. During the Christmas vacation such students might profitably find temporary employment.

Outline of Courses

(For 1915--1916.)

ECONOMICS.

A. 1. Definitions—Methods—Schools—Liberalism—Socialism—Solidarism—Rights of Property—Wealth—Price—Production (nature, labor, capital). Money—origin and functions. Coinage—Bimetallism—Monometallism. Consumption and Distribution—Rent—Profits—Interest—Wages.

A. 2. Credit—Banks and Banking—American and Foreign. Currency laws and federal banks. Emergency Currency. International Commerce. Balance of trade and accounts. Customs and imports. Protection and Free Trade.

A. 3. Transportation—evils and remedies. Private and Government ownerships. Corporations, advantages and limitations. Trusts and monopolies. Restrictions and remedies for evils. Interstate trade commission and federal control. Taxation—Revenue—Public Debts. Insurance.

ETHICS.

B. 1. General Ethics—Man, his nature and ultimate destiny. Human actions and the principles of morality. Virtues and passions. Laws—eternal, natural, positive. Civil law and Conscience. Obligation, promulgation and sanction of law. Utilitarianism.

B. 2. Natural Law—rights and duties in general. Duties to God, to self and to fellowman. Religion and self-love. Malice of homicide, lying and theft. Private ownership—rights—titles and violations. Transfers of rights, land and labor. Right to work and wages.

B. 3. Society in general—domestic society—its rights and duties. Unity and indissolubility of marriage. Divorce, absolute and relative. Education and the State. Civil Society, origin and necessity. Forms and functions of government. Civil sanctions and capital punishment. Tyranny and anarchy. International law.

HISTORY OF SOCIAL REFORM.

C. 1. Primitive reforms—Mosaic laws and regulations. Social activities in Oriental, Greek and Roman history. Christianity and its social value. Communism in the early Church. Social reforms of early popes. Educational and social work of the first religious orders. The parish a training for citizenship.

C. 2. Medieval Reforms—the democracy of the Church. Rise of labor guilds; the position and condition of labor. Technical education of the masses; Universities, public and industrial schools. Hospitals and organized charities. Poverty and wages; health and housing. Old age pension and social insurance. Day nurseries and state loan agencies.

C. 3. Modern Reforms. Europe in 17th and 18th centuries. The impoverishment and degradation of the masses. Poor Laws. The industrial revolution and rise of organized labor. Unrest and legislative reforms. Workingmen's Compensation. Compulsory insurance and old age pensions. Law and tax reforms. Health, housing, court and prison reforms.

SOCIAL REORGANIZATION.

D. 1, 2, 3. First principles concerning the family, the individual and the state. Application of Christian principles and practice to modern social conditions and tendencies. Reforms private and civic; purposes and methods of investigation, interpretation and treatment. Special study of defective, delinquent and dependent wards of the State. The organization and administration of public and private institutions.

INDUSTRIAL REORGANIZATION.

E. 1, 2, 3. The causes and factors of modern labor problems; relations of employer and employee; social and religious aspects of economic questions: the living wage, safe and sanitary labor conditions; Labor legislation; Sunday rest, workingmen's compensation, housing and transportation, immigration, unemployment, social insurance, etc.

SOCIAL STATISTICS AND FIELD WORK.

F. Statistics as a factor in the field of social study. Social resources and liabilities studied in official reports and private in-

vestigations. Collection and tabulating of data. Methods of acquiring facts, weighing and interpreting evidence. Particular cases are taken, studied and discussed.

RACE PROBLEMS.

G. Problems of population, political, economic and social causes and effects. Birth and death rates, infant mortality, race suicide, disease, war, alcoholism, eugenics and sex hygiene. Immigration —methods of assimilation and restriction, colonization. Asiatic and negro problems.

THE CHURCH AND SOCIAL SERVICE.

H. The social value of religion. The function of the Church in modern social problems. Relief and preventive agencies of social service in the Church, especially the religious orders of men and women—hospitals, houses of correction, orphanages and asylums. Organizations such as Society of St. Vincent de Paul and others.

HEALTH AND HOUSING.

I. The problems of municipal health, infectious and contagious diseases, public and private hospitals and nursing, water and milk supply; public baths, sewerage and garbage disposal, care of streets and parks; building and housing reforms. Tuberculosis. Social diseases.

PHYSICAL AND PSYCHIC FACTORS IN DEPENDENCY AND DELINQUENCY.

J. Biologic aspects of inferior and anti-social elements—age—sex—disease—heredity—education—environment—race traits and personal habits. General and individual conditions, physical, mental and nervous allied to dependency and delinquency. Private and public methods of reform. Psychopathic institutes. Prison reforms.

CHILD WELFARE.

K. Infant and child welfare in public and private institutions, birth registration, medical inspection and compulsory education. Care of defective, dependent and delinquent children. The child in industry and child labor legislation. Children's aid societies. Recreation—playgrounds and social centers.

PROBLEMS OF LOCAL GOVERNMENT.

L. 1, 2. The sphere, duties and methods of modern local government. Problems of social and civic welfare, with special reference to tenements, health, housing and transportation; the prevention and treatment of crime. City planning and municipal owership of common necessities.

PROBLEMS OF NATIONAL GOVERNMENT.

L. 3. Centralization and socialization of modern governments. Governmental restraint and control of commerce and manufacture. Economic and social effects of departments of agriculture and labor. Pure food laws—and labor legislation.

Evening Courses

SOCIOLOGY.

Economic evolution—Liberalism and Socialism. The factors of solution—the individual, the state, the church—Solidarism.

THE LABOR QUESTION.

Conditions and reforms—relation of employer and employe—wages—strikes—lockouts—boycotts—arbitration and conciliation. Labor Unions and Manufacturers' Associations—Private reforms—Industrial betterment. Legislative reforms—Minimum wage—Workingmen's Compensation—Labor hours and Sunday rest—Moral and sanitary enviroment—woman, child and immigrant labor—Compulsory insurance—death—disability—unemployment. Health, housing and transportation. Co-operative Societies—the small factory and handicraft. Vocational education. Religious influences.

COMMERCIAL AND INDUSTRIAL PROBLEMS.

Competition—law of demand and supply. Trusts and Monopolies—economic and social advantages and dangers. Moral

and legislative restrictions. Railroad evils and government ownership. Interstate Commerce and Federal Control. Currency legislation, profits, rents and interest.

PROBLEMS OF GOVERNMENT.

National and local—poverty and pauperism and crime. Tuberculosis and occupational diseases. Social and Sex Hygiene. The social evil and white slave traffic. Charity and philanthropy defectives, dependents and delinquents. Modern methods of investigation, interpretation and treatment.

THE AGRARIAN PROBLEM.

Conditions and objects of reform. Social agencies and agricultural schools. Scientific and monetary government aid. Back-to-the-land movement and Colonization of Immigrants. Preservation of National resources.

THE WOMAN PROBLEM.

The general movement—woman's place in society—her present condition—Suffrage and reform. Woman in industry and domestic service. Higher, vocational and co-education. Christianity and the exaltation of woman.

ETHICS

General Ethics—Man, his nature and ultimate destiny. Human actions and the principles of morality. Virtues and passions. Laws—eternal, natural, positive. Civil law and Conscience. Obligation, promulgation and sanction of law. Utilitarianism.

Natural Law—rights and duties in general. Duties to God, to self and to fellowman. Religion and self-love. Malice of homicide, lying and theft. Private ownership—rights—titles and violations. Transfers of rights, land and labor. Right to work and wages.

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HISTORY OF SOCIAL REFORM.

Primitive reforms—Mosaic laws and regulations. Social activities in Oriental, Greek and Roman history. Christianity and its social value. Communism in the early Church. Social reforms of early popes. Educational and social work of the first religious orders. The parish a training for citizenship.

Medieval Reforms—the democracy of the Church. Rise of labor guilds; the position and condition of labor. Technical education of the masses; Universities, public and industrial schools. Hospitals and organized charities. Poverty and wages; health and housing. Old age pension and social insurance. Day nurseries and state loan agencies.

Modern Reforms. Europe in 17th and 18th centuries. The impoverishment and degradation of the masses. Poor laws. The industrial revolution and rise of organized labor. Unrest and legislative reforms. Workingmen's Compensation. Compulsory insurance and old age pensions. Law and tax reforms. Health, housing, court and prison reforms.

Acknowledgements

The officers and faculty of the School of Sociology acknowledge with thanks the following benefactions:

Most Rev. James E. Quigley, D. D.....Annual Scholarship
The Catholic Woman's League, Chicago.....Annual Scholarship
Mrs. John M. King, New York.....Annual Scholarship
A Friend .....Annual Scholarship
Catholic Woman's Social Service Association.....Books
Russell Sage Foundation.....Books and Pamphlets
United States Department of Labor.....Books and Pamphlets
Illinois State Board of Charities.....Books and Pamphlets
New York Department of Labor.....Books and Pamphlets
Massachusetts Department of Labor.....Books and Pamphlets
Department of Public Welfare, Chicago.....Pamphlets
Andrew Maguire.....Set of Catholic World
Miss E. Meade.....Books

Degrees Conferred 1915

James Fitzgerald, A. M.
Ella Rose Connell, B. S.
Ross Kirkpatrick, B. S.
Celia M. Gilmore, B. S.
Thurber M. Smith, A. M.
John C. Gillespie, B. S.
George W. McCrary, B. S.
Kate Meade, B. S.
Edward F. Troy, M. D., B. S.

Register of Students, 1914-1915

NAME	COURSES
Mary Agnes Amberg	1, 2
Annie L. Ashfield	1, 2
Antonette Behnke	2
Anna Bigley	1
Katherine F. Birmingham	1, 3
Florence M. Boyer	4
Charlotte E. Buckley	3
Marie E. Burns	1
Mrs. Thomas Burns	1, 2, 3
Maurice W. Byrne	4
Elizabeth M. Cahill, M.D	3
Minnie K. Cannon	1
Simon F. Casey	2
Agnes M. Cavanagh	1, 2, 3
Agnes B. Clohesy	1, 2, 3
Nellie Collins	3
Anna E. Collins	3
Mary Connaughton	1, 2, 3
Clara C. Conlon	2, 3
Ella R. Connell, B.S	1, 2, 3, *
Agnes R. Crotty	1, 2
Ella M. Cullen	4
Onnie Cunniff	2, 3, *
Jewel F. Cushing	1, *
Katherine M. Cushing	1, 2, 3
Elizabeth K. Davlin	2
Teresa V. D'Elia	3, *
Mary M. Demerse	1
Catherine Dixon	1
Agnes E. Dolan	1, 2
Eleanor Donohue	4
Julia R. Doyle	1, 2
Julia M. Doyle, A.B	2, 3
L. Elsie Drake	1, 2
Elizabeth Drew	1
Helen Farrell	4
Mary B. Finan	1
Catherine E. Fitzgerald	3, *

NAME	COURSES
James Fitzgerald, A.M.	1, 2, 3, *
Sarah A. Fleming, A.B.	1
Nell Foelsch	3
Mazie R. Fugate	1, 2
Raymond H. George	4
Marcella Gill	4
Daisy Gill	4
John C. Gillespie, B.S.	1, 2, 3, *
Celia M. Gilmore, B.S.	1, 2, 3, *
Gretta Glasheen	3
Helen Gorecki	4
Nathaniel V. Graves	4
Earl S. Haney	4
Marie R. Harkins	2, 3
Ella C. Hart	3
Lucille C. Hayes	3
Agnes C. Hickey	1, 2, 3
Ella F. Higgins	2, 3, *
Monica Hyde	3
Irene Inderrieden	1, 2, 3, *
Anna M. Kearns	2, 3
Julia Kearns	1
Mary Keenan	2
Arnold H. Kegel	4
Abigail T. Kennedy	3, *
Elizabeth C. Kennedy	2, 3, *
Ross Kirkpatrick, B.S.	4
Laura Kreer, R.N.	1, *
Elizabeth Leahy	4
Margaret Leonard	1
Eleanor Libby	3
Margaret Lyman	1
Cleveland Maclane, M.D.C.	4
Margaret Madden, A.B.	1, 2, 3
Elizabeth Mahon	1, *
Ella B. Maley	1
Katherine E. Maloney	1
Frances P. Martell	4
Mary V. Martin	1
Mrs. William J. McCarthy	2
George W. McCrary, B.S.	1, 2, 3, *
Valeria M. McDermott	3
Lawrence E. McGann, Jr., LL.B.	4
Margaret McGivern	1

NAME	COURSES
Mary E. McGrath	1, 2
Philip H. McGrath, A.B., LL.B	2
Julia McGuire	1
Patrick T. McGuire	4
Thomas A. McKenna, LL.B	4
Irene McMahon	2, 3, *
Helen C. McSweeney	1, 2
Mary F. McWhorter	1
Kate Meade, B.S	1, 2, 3, *
Emma Meade	1, 2, 3, *
Edwina A. Meaney	1, 2, 3, *
James F. Melody, LL.B	4
Anna A. Moloney	1, 2, 3
Alice Moran	2
Elizabeth Moynihan	2, 3, *
Alice G. Mulcahy	1, 2
Una R. Muldoon	3
Sara E. Mullin	2
Josephine A. Murphy	1, 2, *
Rev. John Navarrette, Ph.B., D.D	3
Mary E. Niemeyer, B.L	1
Anna V. Nowlan	1
Victor J. O'Brien	3
Mary A. O'Connell	2, 3
Margaret O'Connor	1, 2, 3
James O'Connor	1, *
Rebecca O'Connor	2, *
Elizabeth O'Dea	1, 2
Minnie E. O'Donoghue	1, 3
Agnes O'Donaghue	1
Alice M. O'Kane	3
Humilian V. O'Malley	1, 2, *
Mary Onecka	2, 3
Eugene F. O'Riordan, A.M., LL.B	1, 2, 3
Margaret Pickham	1
Alexander Pope, DD.S	4
William A. Porter, M.D	4
Eugene Quay, A.M	2, 3
Catherine Quinn	4
Frances Quinn	4
Josephine L. Quinn	3, *
Frances M. Ranney	2
C. W. Rassmussen	4
Maurice R. Reddy	2

NAME	COURSES
Thomas F. Reilly	4
Margaret G. Reynolds	2
Sara E. Riley	1, 2, 3
Ethel Hill Royster	1, 2, 3, *
Catherine C. Ryan	1, *
Juliet M. Ryan	1
Helen M. Ryan	1
Nellie F. Ryan	2, 3
Mary F. Schladweiler	3
Marie Schroeder	1, 2, 3, *
Mary Sepple	2, 3
Gertrude Shea	2, 3
Ella Sheedy	4
Melita Silverman	1, 2
Martha L. Sinnott	2, 3
Thurber M. Smith, A.M	1, 2, 3, *
Mary F. Stevens	1
C. M. Stoycoff	4
Estella Thulis	1, 2
Edward F. Troy, M.D	1, 2, 3
Rose Turk	1, 2, 3
Herbert D. Ulmer	4
John L. Varley	2
Mary E. Wade	3
Adelaide M. Walsh, R.N	2
Katherine B. Walsh	2, 3
Esther Watts	3
Eldora Welsh	2
Carrie Wheelan	2, *
Julia D. Williams	3, *
Lucille M. Windette	3, *
Mrs. L. M. Woelffel	4
Total number of students	158

In the 1914-1915 Catalogue the following names were unintentionally omitted:

Elizabeth Maher	1
Irene Morley	1

Loyola University

Chicago, Illinois

1500 Students 130 Professors

Conducted by the Jesuits

Colleges of Arts and Sciences

St. Ignatius College, West 12th Street and Blue Island Avenue.

Loyola College, Loyola Avenue and Sheridan Road.

Law Department

Ashland Block, Clark and Randolph Streets.

Engineering Department

Loyola Avenue and Sheridan Road.

Medical Department

Fulton and Ada Streets.

Sociology Department

Ashland Block, Clark and Randolph Streets.

Pharmacy Department

Loyola Avenue and Sheridan Road.

1916-1917 Year

Opens October 2, 1916

LOYOLA UNIVERSITY PRESS
1915

Central States College of Pharmacy

LOYOLA UNIVERSITY

Department of Pharmacy

1915-1916

Down-town Offices, Suite 501 Ashland Block
Randolph and Clark Streets
Chicago

Application for Matriculation

CENTRAL STATES COLLEGE OF PHARMACY
Department of Pharmacy
Loyola University

The student intending to take the course should fill in this form, and mail it to the Registrar together with the matriculation fee of five dollars. Students are permitted to select their seats in order of enrollment.

Name in full.....

Address .....

Month, day and year of birth..... *age, yrs*.....*month*.....

What Class do you desire to enter? .....

Are you a Grammar School Graduate? .....

Are you a High School Graduate? .....

Do you desire work while attending?..... ....

.....

Forward to G. L. SECORD, M.S., Ph.G., Registrar
Loyola Avenue and Sheridan Road
Chicago, Illinois

College Calendar

1915

Junior Lectures begin.....Tuesday, September 28
Junior Laboratories open.....Saturday, October 2
Senior Lectures begin.....Wednesday, September 29
Senior Laboratories open.....Monday, October 4
Ebert Memorial Day.....Thursday, November 18
Thanksgiving Day, holiday.....Thursday, November 25
Junior Lectures close for holidays.....Saturday, December 18
Senior Lectures close for holidays.....Friday, December 17

1916

Junior work resumed.....Tuesday, January 4
Senior work resumed.....Monday, January 3
Washington's Birthday.....February 22
Lincoln's Birthday, holiday.....Friday, February 12
Junior Laboratories close.....Saturday, April 30
Senior Laboratories close.....Friday, April 29
Junior Lectures close.....Saturday, April 30
Senior Lectures close.....Friday, April 29
Examinations begin.....Monday, May 2
Examinations end.....Saturday, May 21
Commencement .....Tuesday, June 1

Officers of the College

G. L. Secord.....President
W. F. von Zelinski.....Secretary
R. H. Phillips.....Treasurer

BOARD OF TRUSTEES

Roland H. Phillips,
John L. Mathery, S.J.,
W. F. von Zelinski,
John D. Leek,
Henry S. Spalding, S.J.,
Peter S. Bartzen,
G. L. Secord.

OFFICERS OF THE BOARD

R. H. Phillips.....President
Peter S. Bartzen.....Vice-President
G. L. Secord.....Secretary-Treasurer

BOARD OF CENSORS

George J. Kappus,
Robert Robinson,
William Silverberg,
R. R. Rains,
Albert F. Burhop,
M. A. Bilz,
Andrew I. Smith,
L. L. Huston.

The Faculty

JOHN L. MATHEBY, S.J.....1076 West 12th Street
President of the University.

HENRY S. SPALDING, S.J.....Loyola Avenue and Sheridan Road
Regent-Director of Faculties.

ROLAND HODGE PHILLIPS, Sc.B., Ph.G., M.D...118 South Winchester Avenue
Dean of the Faculty—Professor of Organic Chemistry

GEORGE LOUIS SECORD, M.S., Ph.G.....6334 Wayne Avenue
Registrar—Professor of Theory and Practice of Pharmacy.

WALTER FRANZ VON ZELINSKI, Sc.B., M.D., Ph.G.4709 North Rockwell Street
Secretary of the Faculty—Professor of Materia Medica and Botany.

EDWARD J. MORGAN, PH.D.....Loyola Avenue and Sheridan Road
Professor of Inorganic and Analytical Chemistry.

ARTHUR WAY WHEELER, Ph.G.....3759 Lake Avenue
Instructor in Botany and Plant Histology.

THOMAS A. CARTER, Sc.B., M.D.....919 Wellington Avenue
Professor of Physiology and Toxicology.

ROBERT L. BORCHERT, M.D.....5045 Lincoln Avenue
Instructor in Materia Medica.

THOMAS A. KELLY, S.J.....Loyola Avenue and Sheridan Road
Professor of Physics.

HUGH A. CAPERTON, LL.B.....106 North La Salle Street
Lecturer on Pharmaceutical Jurisprudence.

A. A. NEFF, Sc.B.....Loyola Avenue and Sheridan Road
Instructor in Mathematics and Book-keeping.

HENRY G. LESCHER, PH.G.....
Assistant in Pharmacy.

HISTORICAL

The Central States College of Pharmacy, Department of Pharmacy of Loyola University, now in its eighth year, was organized and duly chartered under the laws of the State of Illinois to give instruction in Pharmacy and its allied branches.

The work began in a specially equipped building at 1360 Fulton Street, on the West Side, where, after two years of diligent and successful study, the first class of six students was graduated.

From the very beginning the courses of study were planned and given on the broadest possible basis, and the high standards which were taken and accepted at the outset have since proved invaluable in establishing a name and reputation for the college.

Each year it has been found necessary to enlarge the teaching facilities and faculty, and as a further indication of the progressiveness of the institution, arrangements for an affiliation with Loyola University were completed in the spring of Nineteen Ten, the college becoming its department of Pharmacy.

This arrangement enabled the college to permit of more intensive teaching, and since which time the enrollment has steadily increased. The necessity for larger and better quarters now became imperative, so that at the expiration of the term of 1911-12, the college and student body removed to the new and modern structure known as the Michael Cudahy Science Hall of Loyola University.

This building is not only ideally located on the beautiful North Shore overlooking Lake Michigan, but is equipped with all modern appliances and furnishings for lecture, quiz and laboratory instruction. Elsewhere will be found descriptions of equipment, outline of courses, etc.

ANNOUNCEMENT

The regular annual course of instruction in the Central States College of Pharmacy, Department of Pharmacy, Loyola University, will begin Tuesday morning, September 28th, at ten o'clock, and will continue until May 21st, Nineteen Hundred Sixteen, covering a period of more than 600 lectures and 700 laboratory hours, exclusive of holidays.

The completion of two full terms is required for graduation,

and the degree in Pharmacy is conferred upon those who have satisfactorily completed the work. The course is systematic, scientific and practicable, affording a training which enables the graduate to safely assume the duties of the modern Pharmacist.

REGISTRATION

To facilitate Registration, students are requested to report to the Registrar during the week preceding the opening of the school term, or before this time if convenient, for the purpose of arranging for entrance. The days assigned for Registration are Monday, Wednesday, and Saturday. Special arrangements may be made by letter or telephone.

RECOGNITION

The Central States College of Pharmacy meets with every requirement of the State Board of Pharmacy and is therefore recognized by this body. All candidates for registration must pass a satisfactory examination given by the Board before being granted permission to practice in the State of Illinois. With but few exceptions this rule is applicable to other states as well.

REQUIREMENTS FOR ADMISSION

Applicants for admission to the course leading to the degree of Graduate in Pharmacy must be of good moral character, not less than seventeen years of age, and must show record of a preliminary training of at least one year high school or its equivalent after the completion of the Grammar Grades. Applicants for the course who feel qualified to enter, but are lacking in the necessary credentials, are requested to take the ENTRANCE EXAMINATION, conducted by the officers of the University.

SPECIAL STUDENTS: Applicants who fail to pass the entrance examination are permitted to pursue the course of instruction with the regular class. Upon the successful completion of the work, the student will receive a certificate showing that he has completed the regular course of instruction at this institution.

ENTRANCE SUBJECTS

A unit represents the equivalent of five prepared recitations a week for one scholastic year in a single subject.

Four units are required for entrance.

	Units.		Units.
*English	1	Physical Geography	½
*Algebra, elementary	1	Physiology	½
Algebra, advanced	½	Book-keeping	½
Plane Geometry	1	Civics	½
*Advanced Arithmetic	½	Literature	1
Solid Geometry	½	Spanish	1
Elementary Physics	1	Latin	1
Plane Trigonometry	½	Greek	1
Elementary Chemistry	1	German	1
Biological Science	½	French	1
Botany	½	History	1
Zoology	½		

*Obligatory.

When applying for entrance the applicant must furnish proof of work covering one credit in English, one credit in Elementary Mathematics and Advanced Arithmetic. The balance of the credits for entrance may be in any of the subjects above enumerated. Those in the course of preparation for entrance to our institution are advised to follow the above list in the selection of their studies.

ADVANCED STANDING

Students who have completed the first year in other recognized institutions will be permitted to enter the Senior Class by first placing on file with the Registrar a complete and satisfactory record of the work done, which must equal the work of this institution.

For further particulars, address the Registrar.

THE COLLEGE BUILDING

Is a four-story new and modern steel structure, fire-proof, sanitary, and perfectly lighted and heated. The building is located at Loyola Avenue and Sheridan Road, on the North Side of the city; is easily accessible by way of elevated and surface lines, and can be reached from almost any part of the city by a single five cent fare.

The lecture halls and laboratories are of the most recent design and are equipped with all the necessary seats, blackboards, demon-

stration tables, laboratory tables, apparatus and accessories for the proper performance of the work.

THE PHARMACY LECTURE HALL

Is located at the north end of the building; is perfectly ventilated and heated and receives light from two full sides of the room. The artificial light is that of electricity and the proper illumination is obtained by refraction.

The room is 50 x 40 feet and will comfortably seat from 90 to 100 students.

The seats are in tiers, and each tier is elevated slightly above the one in front, thus giving the student a clear view to everything that is being done. A large demonstration table, with water and gas connections, is at the disposal of the instructor to elucidate the work by practical demonstrations, thus impressing the didactic work more firmly on the minds of the students.

THE CHEMISTRY HALL

Is the same as the Pharmacy Lecture Hall except that Fume Chambers, Chemicals and Chemical Reagents are at the handy disposal of the Instructor. Charts of the Elements, Periodic Law, etc., are before the student constantly, thus giving an opportunity to study these at will.

THE MATERIA MEDICA LECTURE HALL

Is on the south side of the building. It is perfectly lighted, ventilated and heated, and also receives natural light from two full sides of the room. Artificial light is by refraction.

This room is 50 x 40 feet and will accommodate about 100 students. The seats are elevated in the same way as those in the Pharmacy Lecture Hall, the rise being about 30 inches in 40 feet.

The Materia Medica Lecture Room directly adjoins the Histology Laboratory, where specimens of crude drugs can be had for the work in this subject.

THE PHARMACY LABORATORY

Is located on the second floor on the north end of the building. The Laboratory is provided with gas, water and all accessories and will accommodate 64 students.

This room is 65 x 29 feet and each student is provided with from 7 to 8 square feet of working space.

THE CHEMISTRY LABORATORY

Adjoins the Chemistry Lecture Room and is located on the main floor, on the north side of the building. The laboratory is provided with fume chambers and all accessories. It is 75 x 29 feet and will accommodate 80 students; each student having 7 to 8 square feet of working space. A balance room directly adjoins this laboratory, where all weighing for analysis is done.

THE HISTOLOGY LABORATORY

Adjoins the Materia Medica Lecture Hall on the south end of the building and is provided with eight tables accommodating six students each. Additional space is available, when necessary, around the sides of the room where provision is made for fifteen students. The light is natural, coming in abundance from two full sides of the room. Each student is supplied with an outfit for the work in Histology which he keeps in a drawer provided for that purpose.

The Histology Laboratory is also used for the work of Pharmacognosy and Physics.

COURSE OF INSTRUCTION

The course of instruction is divided into a Junior and Senior year, comprising thirty-two weeks each. Junior and Senior students attend three days each week, alternately. This arrangement enables the student to gain that practical experience in pharmacy required for license by the various State Boards of Pharmacy, as well as to provide a source of income; the average remuneration for such services ranging from six to twelve dollars weekly, thus permitting many to earn their own way who could not otherwise attend.

Lectures, Quiz and Laboratory instruction are employed in all departments for the giving of the work. Students are required to take all monthly examinations, be in regular attendance and adhere closely to the rules of the college. Candidates will be excused from the final examination in each subject in which a general average of eighty per cent or above for the year has been attained.

THE LIBRARY

The Library contains the newest reference works on the subjects taught in the college, as well as the current issues of the various

Pharmaceutical Journals which are published weekly or monthly and afford an excellent opportunity for the student to keep abreast of the times in the way of commercial reports, newer remedies, discoveries, and the meetings and workings of the various Pharmaceutical Associations.

The Library facilities were greatly increased in 1912 by the addition of the entire Library of the late Emil A. Hiss, Ph.G., including more than one hundred volumes of works in Pharmacy, Chemistry, Materia Medica, etc., besides other works valuable to the student of Pharmacy.

Students have access to the Library at all times and may be assisted in their study by those in charge. Students are requested to consult these references frequently, and to seek information not obtainable here in the great Libraries of the city, where anything desired will be supplied without cost.

Outline of the Course

JUNIOR YEAR

Subjects—	Hours per Week 1st Sem.	Hours per Week 2d Sem.	No. of Weeks 1st Sem.	No. of Weeks 2d Sem.	Total No. Wks.	Total No. Hrs.
Chemistry Theoretical	3	3	16	16	32	96
Botany-Biology-Bacteriology	2	2	16	16	32	64
Experimental Chemistry	4	0	5	0	5	20
Pharmaceutical Laboratory	2	3	16	16	32	80
Microscopy	2	2	16	16	32	64
Physiology	1	1	16	16	32	32
Pharmaceutical Arithmetic	1½	0	16	0	16	24
Qualitative Analysis	4	4	11	16	27	108
Dispensing	0	2	0	16	16	32
Pharmaceutical Latin	0	3	0	2	2	6
Physics Laboratory	2	0	8	0	8	16
Physics Lecture	1	0	16	0	16	16
Pharmacognosy	0	1	0	16	16	16
Materia Medica-Toxicology	0	3	0	5	5	15
Pharmacy Theoretical	2	3	16	14	30	74
Mathematics	1	0	16	0	16	16

Total number of lecture hours, 343; Laboratory hours, 336.

SENIOR YEAR

Subjects—	Hours per Week 1st Sem.	Hours per Week 2d Sem.	No. of Weeks 1st Sem.	No. of Weeks 2d Sem.	Total No. Wks.	Total No. Hrs.
Pharmacy Theoretical	3	3	16	14	30	90
Chemistry Organic	3	3	16	16	32	96
Materia Medica	3	3	16	6	22	66
Quantitative Analysis	5	0	16	0	16	80
Pharmaceutical Laboratory	3	3	16	16	32	96
Dispensing	2	2	16	16	32	64
Pharmacognosy	1	1	16	16	32	32
Histology Laboratory	2	2	16	16	32	64
Pharmaceutical Testing	0	5	0	8	8	40
Posology-Toxicology	0	3	0	10	10	30
Drug Assaying	0	5	0	6	6	30
Pharmaceutical Jurisprudence	0	1	0	6	6	6
Commercial Pharmacy	0	3	0	2	2	6
Qualitative Analysis	0	5	0	2	2	10

Total number of lecture hours, 294; Laboratory hours, 416.

SUBJECTS AND METHODS
PHARMACY

G. L. Secord, M.S., Ph.G., Professor of Pharmacy

JUNIOR YEAR

The didactic work in Pharmacy during the Junior year will extend throughout the term and includes two lectures and one quiz hour each week. This time includes the allotted hours for Pharmaceutical Latin, which is given at the close of the second Semester.

The time during the first Semester is equally divided between the Theory of Pharmacy and Pharmaceutical Arithmetic, except for the book-keeping and ordinary mathematics, which is conducted separately, and includes one hour per week each. The time during the second Semester is devoted exclusively to Pharmaceutical Technique and Inorganic Pharmacy.

The work in the Operative Laboratory begins with the opening of the term and continues throughout the year, while the Practice in Dispensing will occupy two hours each week during the second Semester.

For convenience of study the subject will be considered under the following divisions:

Elementary Pharmacy: Under this division will be considered in the beginning lectures, the history, development and classification of Pharmacy, together with a comprehensive study of the various Pharmacopoeias, including their methods of preparation, degrees of authority, importance, use, etc. Specific Gravity and Volume with Metrology will receive due consideration.

Pharmaceutic Arithmetic: The object of the work in this branch is to teach the student to use easily and accurately the various systems of weights and measures. The work in mathematics, which is given separately, includes a review of common and decimal fractions, proportions, etc., and prepares the student for the calculations of strength and proportions of the various Pharmaceutical Preparations, percentage strength, alligation, dilutions, solutions, Specific Gravity calculations, and the arithmetic of Commercial Pharmacy.

Chemical and Physical problems are fully considered with relation to the laws of simple and multiple, combining proportions by weight, molecular weight, Atomic composition, and the determination of Molecular Formulae.

Pharmaceutical Technique: This subject comprises a study of the various operations employed in the practice of Pharmacy and includes, besides the regular lectures, practical demonstrations of the proper selection and use of the various apparatus and materials, as well as the carrying out of the official procedure in each case.

Inorganic Pharmacy: In this division the metallic and non-metallic elements are duly considered with especial reference to their official compounds, and preparations. The official nomenclature, properties, manufacture, derivation, production and commercial supply are given for each substance, and when advisable their respective preparations and uses.

Pharmaceutical Latin: In order that the student acquire a fundamental knowledge of prescription writing, it is deemed advisable to make a short study of the Latin language. This study includes declensions, conjugations, numerals, ordinals, construction, translations, etc. The student will also receive minor prescription reading and instruction along the lines of incompatibilities.

DISPENSING

The exercises in this branch during the Junior year will be for the purpose of impressing the more simple work in prescriptions, with especial reference to dosage, saturations, percentage solutions, dilutions, labeling, and the more common incompatibilities. The student will receive also an abundance of experience in the correction of common errors in prescription work.

SENIOR YEAR

PHARMACY

The Senior year begins by taking into consideration the manufacture of Extractive preparations, commencing with the simplest forms, such as infusions, decoctions, and gradually advancing to the

more elaborate preparations, as the Tinctures, Fluid Extracts, Resins, and Oleo-Resins.

The various classes of preparations are presented in progressive order, and are exemplified by grouping according to their drug strength.

The preparations of the solids, such as troches, pills, confections, cachets, tablets, capsules, ointments, cerates, suppositories and plasters, are next considered with respect to their consistence and therapeutic uses.

GALENICAL PREPARATIONS

These preparations of the U. S. P. and N. F. are prepared according to classification and strength, the manufacturing of which follows closely upon the didactic work.

The student is successively drilled in dosage, synonyms, and common names, both in the Laboratory and Quizzes.

ORGANIC PHARMACY

This branch includes the study of: Cellulose, Hydrocarbons, Carbohydrates, fixed and volatile oils, alcohols, Coal and Wood Tar products, and the compounds and modifications of each.

The Glucosides and Alkaloids are taken up with reference to their derivation and production. Serum Therapy is fully considered as regards the production, preparation and standardization.

Ferments and Animal products are next considered with reference to the derivation, preparation and uses.

PHARMACEUTICAL LABORATORY

Here, as in the Junior year, it is advisable that the Laboratory exercises follow closely upon the lectures.

The student is drilled in the manufacture of the various preparations of the U. S. P. and N. F., including: Tinctures, Fluid Extracts, Extracts, Soaps, Ointments, Poultices, Cerates and Suppositories.

DISPENSING

Besides the regular work of compounding the extemporaneous preparations from the U. S. P. and National Formulary, the student will here receive especial attention in the compounding and reading of original physician's prescriptions, including also the consideration of the various kinds of incompatibilities.

The administration of the various mixtures in various forms and modifications is next considered, and following this the preparation of Pills, Cachets and Tablets.

For completion of the subjects the student is drilled in prescription writing, abbreviations and various methods of wrapping packages.

TEXT BOOK

Text Book—Arny's Principles of Pharmacy.

Reference Works—Caspari's Pharmacy, United States Pharmacopoeia, and National Formulary, Scoville's Art of Compounding, Remmington's Practice of Pharmacy.

CHEMISTRY

R. H. PHILLIPS, Sc.B., M.D., Ph.G., Professor of Organic Chemistry.

EDWARD J. MORGAN, PH.D., Professor of Analytical and Inorganic Chemistry.

JUNIOR YEAR

The study of Chemistry in the Junior year begins with a thorough consideration of those underlying principles which are so necessary for the proper comprehension of the work to follow, and includes such as: Matter, mass, valency, the elements and their nomenclature, chemical formulæ, equations, the atomic theory, the molecular theory, the corpuscular theory, the laws and their application.

The elements are then taken up with reference to their classification, derivation, production, properties, uses, and the manufacture of their respective compounds.

Instruction is given by lectures, laboratory exercises and quizzes. The lectures are replete with numerous experiments and demonstrations, thus presenting the various topics of the subject in a practical as well as a theoretical manner.

LABORATORY

The exercises in the laboratory follow closely upon the didactic work and include during the first Semester: Physical changes, chemical changes, a study of the more important gases, acids, bases and salts, and a thorough consideration of the acid radicals with reference to their properties and detection. Considerable attention is given to methods of oxidation and reduction and at the same time a practical demonstration of the valency of elements. During the second Semester the work in qualitative analysis is taken up, when the student will be required to analyze twenty-five unknown solutions and substances.

CHEMISTRY
SENIOR YEAR

The study of Inorganic Chemistry is here resumed and later, after a thorough introduction of the principles involved, the study of Organic Chemistry is taken up. The various classes of hydrocarbons are fully considered and the student is successively drilled in the methods of oxidation and reduction in the preparation of: Alcohols, aldehydes, acids, ketones, ethers. Petroleum is considered with reference to its composition and the methods in the preparation of the official derivatives. These are then studied according to their chemical composition, specific gravities, boiling points, flashing points, color, consistency, etc.

Benzine, aniline, and other substances are duly considered with reference to their derivation and the properties and production of the most important compounds.

QUANTITATIVE ANALYSIS
VOLUMETRIC—GRAVIMETRIC

The beginning work deals with the methods of standardizing the various kinds of apparatus, such as: Pipettes, burettes, and the theoretical estimation of the purity of salts, thus bringing to the mind and attention of the student the proper methods of calculating the percentage purity of a compound.

The estimation of simple substances, such as: Acids, bases, are next taken up, gradually advancing to the analysis of the more complex salts. The percentage of purity of such substances as: Phenol, citral, formaldehyde, etc., are also considered, and following, this, pharmaceutical assaying, urine analysis and sanitary analysis.

Pharmaceutical Testing: Will include the various tests applied to the pharmacopoeial substances for determining the presence of various impurities.

Text Books—Junior: MacPherson & Henderson's Inorganic Chemistry, Secord's Qualitative Analysis, Smith's Inorganic Chemistry, Muter's Qualitative Analysis.

Senior: Noye's Org. Chemistry, Schimph's Essentials of Volumetric Analysis, Coblentz & Vorisek's Vol. Analysis, U. S. P.

MATERIA MEDICA

W. F. von Zelinski, M.D., Ph.G., Professor of Materia Medica.
Arthur W. Wheeler, Ph.G., Instructor in Histology.

This course is taken up during the latter part of the Junior year and continues throughout the entire curriculum. It comprises a thorough consideration of the source of the various substances used for medicinal purposes, as well as the study of the characteristics of the plant, mineral or animal, yielding the drug.

The study of the action and uses of drugs will be outlined as far as possible on a therapeutic basis, that is, groups of drugs acting in like manner will be considered as a class. Under this subject will be considered Posology, Pharmacodynamics, Therapy Dynamics, and Toxicology.

Special lectures will also be given on Organic and Serumtherapy and so-called Medicinal foods and Enzymes. Especial attention will be given Official Drugs and National Formulary Preparations.

A brief consideration will be given those drugs which are not of official or of N. F. origin, but which are of proven value and well recognized.

PHARMACOGNOSY

This course, extending throughout the Junior and Senior terms, is practical, comprehensive, and owing to the importance of this

subject no effort is spared to thoroughly instruct each student in this branch. The work will consist of lectures, quizzes and laboratory exercises. In the study of the crude drug, the student will be required to make drawings and to write a description of the various vegetable drugs, their habitat, technical and common name, and constituents.

Specimens will be furnished to facilitate study and every effort will be made to teach the student how to examine a drug in a systematic and intelligible manner. Examinations will be held from time to time as may be deemed necessary to note the student's progress.

BIOLOGY—BOTANY

The scientific Pharmacist has reached a stage when it is no longer possible for him to claim to have a thorough training while he remains ignorant of the great laws of Biology. Without being either a botanist or zoologist it is incumbent on the Pharmacist to learn much of how the world of living things has become what he sees it to be. This is not only possible, but essential. There is no other way in which he can realize the rapid advances being made in the medical sciences along Biological lines and in which work he should, and must eventually, share.

The object of this course, therefore, is to endeavor to gain a broad view of the phenomenon of life, in its various aspects, to see how it became more complex according to changing surroundings and to explain prevailing theories in regard to heredity, immunity and theories of origin and beginnings of life. A number of organisms will be taken up in detail to elucidate the subject.

The course in Botany, while a general one, is taught from the standpoint of its relation to the needs of the modern Pharmacist, and extends throughout the Junior term.

The course consists of systematic lectures, recitations and demonstrations by means of drawings and specimens supplemented by modern projection apparatus. The instruction is so graded as to give a thorough knowledge of the fundamental principles of the science, especially as it pertains to the study of pharmacognosy and as a guide to the determintion of plants.

Consideration is given to the physiology and anatomy of plants as well as classification, and the relation plants bear to each other.

Laboratory Course: To further enable the student to grasp those points essential to a proper understanding of the subject and for the practical instruction in the identification of plants and plant parts, actual specimens or models will be provided which the student will dissect, making drawings and noting important points, thus familiarizing himself with the distinguishing characteristics of the different species and plant organs.

Demonstrations and recitations are also conducted by the instructor and the work is graded at the end of each Semester.

BACTERIOLOGY

This subject is considered under Botany, owing to the classification of Bacteria under plants. As these organisms are daily concerned in the advantages and disadvantages of our well being, and as Bacteriology is one of the foremost sciences in the industrial and medical worlds, it becomes necessary for the Pharmacist to have a certain amount of knowledge along these lines. Accordingly, the lectures on this subject, while not extensive, are sufficient for a good foundation for more advanced work should the student desire it. Demonstrations of culture mediums, staining and cultural characteristics are made. Two or three special lectures are given during this course by outside workers in this field.

PLANT HISTOLOGY

The importance of a knowledge of the minute structure of plants as a foundation for the thorough study of plant physiology and anatomy cannot be overestimated, and it is quite necessary for the student to acquire a mastery of this fundamental study. For this reason the work in this department will be mainly pursued in the laboratory, and lectures, recitations and demonstrations will supplement the work as may be required.

The Laboratory of Histology is especially equipped with new and modern microscopes and needful accessories for proper instruction. Each student will be instructed in the methods of preparing plant tissues for examination, and will prepare, mount and stain a number of carefully selected sections. The students will also be required to make drawings of the various structures under the supervision of the instructor.

The course extends throughout the Junior term and is preliminary to the advanced work of the Senior year, where the knowledge gained of the subject is applied to the identification of powdered drugs and in the detection of adulterations. During the second Semester of the Senior term the student will be examined as to his ability in the identification of various powdered drugs and the detection of admixtures.

PHYSIOLOGY AND ANATOMY

THOMAS A. CARTER, Ph.B., M.D., Professor of Physiology.

This embraces a series of lectures, systematically arranged, followed by quizzes, written and oral.

The work in Physiology is intended to give the student a comprehensive idea of the subject without going into the minute deails.

The general plans of the lectures is as follows:

The plan of the human body
The circulatory system
The respiratory system
The senses and their functions
The digestive system
The nervous system
The locomotor system
A few special lectures will be given on Hygiene

Anatomy: Only the salient features of the subject are emphasized; the aim being to review the most important facts as applied to the needs of the pharmacist.

The anatomy of the various organs is considered, together with their physiology and histology.

The bones, joints and muscles are considered in such a manner as to render intelligible the meanings of the descriptive terms of the science. Charts, skeletons and dissected material will be used as required to elucidate the lectures.

PHARMACEUTICAL JURISPRUDENCE

A series of lectures will be given in this subject, comprising the usual subjects of commercial law, such as: Contracts, agency, partnership, insurance, etc.

Special lectures will also be given on the statutory regulations of the practice of Pharmacy; the Food and Drugs Act, and the Federal Anti-Narcotic Law.

FEES AND EXPENSES

Tuition Fees: The tuition fee for each year is seventy-five dollars, which entitles the student to one continuous course of lectures and laboratory instruction in all branches. This covers the entire cost of chemicals and drugs consumed in the laboratories; no extra fee is charged for materials.

Laboratory Deposit: The requisite apparatus necessary for completion of the work in the laboratories is furnished by the College, and to cover breakage to such apparatus, as well as willful damage to building and fixtures, a deposit of ten dollars is required at the beginning of the term.

From this will be deducted at the end of the year the cost of apparatus broken, missing, or not returnable.

Charge will also be made against deposit for apparatus which is used by the class in common. The remainder of the deposit will be refunded at the close of the term.

Locker fee, one dollar.

PLAN OF PAYMENT

The Faculty has provided three plans of payment of tuition for students attending the college:

Plan A. Pay in full on or before October 1st, 1915.

Plan B. Pay one-half of the fee on or before October 1st, 1915, and half on or before January 15th, 1916. With this plan two dollars will be added to the first payment.

Plan C. Pay one-third of the fee on or before October 1st, 1915, one-third on or before December 15th, 1915, and a third on or before February 15th, 1916. With this plan three and one-half dollars will be added to the first payment.

Students failing to meet payments may be debarred from classes from that date.

PRIZES

Four prizes are voted to the members of the Graduating Class each year by the Faculty, as follows:

First Prize: A Gold Medal—Awarded to the student attaining the highest general average throughout the Senior year, which must be not less than 95%.

Second Prize: A Gold Medal—Awarded to the student attaining the second highest general average throughout the Senior year, which must be not less than 92.5%.

Third Prize: A Bronze Medal—Awarded to the student attaining the third highest general average throughout the Senior year, which must be not less than 90%.

Fourth Prize: One year membership in The American Pharmaceutical Association—Awarded to the student doing the best work in Plant Histology.

ATTENDANCE

The regular attendance of students at recitations, lectures and laboratory periods is required. The absence of any student during the year from more than five recitations or lectures or three laboratory periods in any subject will be deemed equivalent to a condition in the subject in which the periods were missed, and the student will be required to take a final examination in such subjects before being passed.

Any student missing more than five per cent of the work in any subject will be required to make up the full loss before being given credit in the work.

EXAMINATIONS

Junior Year: Monthly examinations will be given in the subjects of: Pharmacy, Chemistry, Botany and Pharmaceutical Arithmetic. Examinations in other subjects will be given at the end of the semester.

Senior Year: Monthly examinations will be given in the subjects of: Pharmacy, Organic Chemistry and Materia Medica. Examinations in Quantitative Analysis will be given in December, February and May. Examinations in other subjects will be held at the close of the semesters.

No charge is made for the regular monthly examinations and no private examinations are given. Students missing a monthly examination will be required to take a final examination in this subject.

Students required to take any final examination will file application for same two days previous to the day such examination is held, together with the examination fee of two dollars.

GRADUATION

To receive the degree of Graduate in Pharmacy, the candidate must have completed in a successful manner the course of study prescribed by this institution and have attended not less than 90 per cent of the lecture, quiz and laboratory instructions. He must be not less than twenty-one years of age, of good moral character, and have had the required amount of practical experience and a preliminary education of at least one year high school after completion of the grammar grades.

Those who successfully complete the course of study, but lack the required practical experience or age, may receive the degree of Bachelor of Pharmacy and the degree of Graduate in Pharmacy conferred when the above requirements have been attained.

A diploma fee of ten dollars will be required.

ENROLLMENT

Places in the lecture halls and laboratories will be assigned to students in order of enrollment. To enroll, the student will fill out matriculation blank and forward it to the Registrar with $5.00 for matriculation fee. Matriculation fee to be paid but once, Students are required to report to the Registrar on the first day of school to make arrangements for the payment of tuition, etc.

EMPLOYMENT

The various Pharmacies throughout the city offer unusual facilities for employment. Those desiring work while in attendance should consult the Registrar as soon as possible after matriculating. The compensation for such services will average six to eight dollars per week; however, as high as twelve and fifteen dollars per week is paid to those having had previous experience in drug stores.

INSTRUCTION TO STUDENTS

All students should report to the Registrar immediately upon arrival in the city, and he will instruct them as to suitable places for securing board and room. The books requisite for the course will be recommended by each individual instructor during the first week of school. For further information, address G. L. Secord, M.S., Ph.G., Registrar, Loyola Avenue and Sheridan Road, Chicago, Illinois.

ALUMNI OFFICERS—1915-16

A. W. Wheeler, Ph.G.....President
W. A. Liesch, Ph.G.....Vice-President
E. K. Rains, Ph.G.....Secretary-Treasurer

Matriculants 1914-1915

ALVAREZ, JOSEPH ANTONIO.....Habana, Cuba
BIEBER, LEON J.....Chicago
BROOKS, LEON.....Chicago
BERGMAN, EMANUEL.....Chicago
CONFORTI, BENJ.....Chicago
DUMANOWSKI, FRANK STANLEY.....Chicago
*HERSHFIELD, ABRAHAM.....Chicago
*HYNES, ALFRED THOMAS.....Chicago
LYMAN, WILLIAM E.....Chicago
*NEWMAN, J. YUILL.....Chicago
NEUZIL, GEORGE THEOFIL.....Chicago
O'CONNOR, THOMAS JOSEPH.....Chicago
REXFORD, FAYETTE HOUSE.....Centralia, Ill.
ROSENTRETER, GUSTAV A.....Chicago
STEGMAN, HERBERT FREDERICK.....Chicago
SARLI, NICHOLAS JOHN.....Chicago
SISKEL, MAURICE.....Chicago
TAGLIA, ANTHONY V.....Chicago
THOMSON, IVAN LLOYD.....Pontiac, Ill.
*TSCHERNEY, HARRY J.....Chicago
†TRACY, JAMES ANTHONY.....Chicago
TEKIENIEWSKI, FELIX A.....Chicago

*Special student.
†Did not attend.

Senior Class 1915

BERMAN, JACOB P. ..... Chicago
BRYKOWSKI, FRANK ..... Chicago
BURNS, FRANCIS JOHN ..... Chicago
BUDNIK, EMANUEL F. ..... Lemont, Ill.
CHRISTENSEN, HOLGER MARIUS ..... Chicago
D'AMBROSIO, FRANK ..... Chicago
*ETTELBRICK, M. SYLVESTER ..... Aurora
FEINBERG, ISADORE MYRO ..... Chicago
GOLLUB, WILLIAM ..... Chicago
*GREIDER, M. URSULINA ..... Joliet
*HOFFMAN, M. ALBERTA ..... Elgin
*KIRCHEN, M. ALPHONSA ..... Joliet
MOLONEY, JOHN P. ..... Chicago
MULVIHILL, THOMAS JOSEPH ..... Chicago
*NASELLI, M. GEMMA ..... Joliet
OLIVERAS, FRANCISCO A. ..... Arecibo, Porto Rico
PAGAN COLON, VICTORIANO ..... Porto Rico
*SCHWAR, M. MILBURGIS ..... Joliet
SULLIVAN, WILLIAM CLARK ..... Flanagan, Ill.
THURMAN, GEORGE LOZELL ..... Chicago
TORRES MOLINA, JULIAN T. ..... Ciego de Avila, Cuba

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*Special student.
HEELER, ARTHUR WAY, PH.G., Master in Pharmacy.

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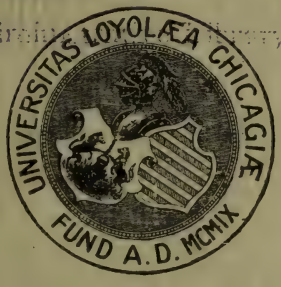

1916

CHICAGO, ILLINOIS

Forty-Sixth Annual

Announcement

of

UNIVERSITY OF ILLINOIS LIBRARY

DEC 2 1920

St. Ignatius College

Department of Arts and Sciences

of

Loyola University

1916

1076 West Twelfth Street

CHICAGO

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Curator of Museums

EDWARD J. KIEFFER, M. D.
Physician

JOHN B. MURPHY, A. M., M. D., LL. D.
Surgeon

GEORGE W. MAHONEY, M. D.
Oculist

College of Arts and Sciences

PROSPECTUS.

Charter.—St. Ignatius College was erected in 1869 for the higher education of the Catholic youth of Chicago and vicinity. It is conducted by Fathers of the Society of Jesus. A charter was granted to the institution by the Legislature of the State of Illinois, June 30, 1870, with power to confer the usual degree in the various faculties of a University. On November 21, 1909, the college became the Department of Arts and Sciences of Loyola University.

Legal Title.—The legal title of the College for the purposes of bequests and donations is
ST. IGNATIUS COLLEGE OF CHICAGO, ILLINOIS.

Curriculum.—The studies pursued in the College comprise the Doctrines and Evidences of the Catholic Religion, Logic, Metaphysics, Ethics, Astronomy, Physics, Chemistry, Botany, Biology, Physiology, Mathematics, Rhetoric, Composition, Elocution, History, the Latin, Greek, English, German and French Languages and Literature.

Location and Buildings.—St. Ignatius College is located at 1076 West Twelfth Street. Its central location makes it easy of access even from the remotest sections of the city. The buildings contain valuable Mineralogical and Natural History Museums, and a library of 50,000 volumes, a department which is reserved for the students. The classrooms are well lighted and comfortable; there is a gymnasium, provided with lockers and shower-baths, and, in general, the College has all the equipment needed for the convenience, comfort, and mental and physical development of the students. The Department of Physics has an ample

lecture room, and laboratories fitted with all the up-to-date apparatus required for experimental purposes. The Department of Chemistry, in addition to its lecture room, has eight large slate-topped tables for qualitative analysis, so arranged as to accommodate eighty students.

Classical High Schools.—The better to secure the results aimed at in its educational work, and to arrange a more perfect co-ordination between High School and Collegiate studies, the University has deemed it advisable to maintain a closely affiliated system of Classical High Schools. Their purpose is to fit their pupils to meet the College entrance requirements by offering a programme of studies based upon those fundamental principles which, in the judgment of the Faculty, underlie alike the work of the High School and the College. At present these schools number two: The St. Ignatius Academy, 1076 W. Twelfth Street, and Loyola Academy, Hayes and Sheridan Road.

GENERAL REGULATIONS.

No Boarding.—The College is intended for day scholars only. Students who live at a distance are not advised to take lodgings in the city, unless they are of a mature age and of a steady disposition.

Entrance.—Candidates for entrance are examined and placed in the class for which their previous attainments have qualified them; and they are expected to bring testimonials from the school which they have last attended.

No one is barred from matriculation on account of his religious opinions, though all are required to show a respectful demeanor during the ordinary exercises of public prayer.

Distribution of Time.—The Academic Year consists of one session, beginning the first week of September and ending in the latter part of June, when the Annual Commence-

ment, the Conferring of Degrees and the Distributions of Premiums take place.

The College is open every morning at half-past 7 o'clock. Those who come before the time of class proceed at once to the class-rooms and spend the interval in private study. All are required to be present five minutes before half-past 8 o'clock, at which hour the Catholic students hear Mass. The regular class exercises begin immediately after Mass and close at 3 p. m.

Thursday is the weekly recreation day.

Attendance.—As regular attendance is an important element in class-standing and an essential condition for successful work, students must not be detained or withdrawn from classes except for very grave reasons. For absence, or for permission to withdraw before the close of the daily session, a note from the parent or guardian will invariably be required. Mere absence does not excuse a student from the obligation of preparing his ordinary recitation or relieve him from any part of his examinations. Frequent absence or tardiness, except on account of sickness, is sufficient cause for dismissal. Students are required to be present eighty-five per cent of the school year to merit promotion in June.

Sickness, however, will be considered a valid excuse, provided a doctor's certificate be presented after an absence of a week or longer.

Home Study.—All the endeavors of the Faculty will fail to insure success for the students unless they apply themselves to their studies with diligence and constancy outside of class hours. Approximately twenty-five hours each week are spent in class work; and to prepare recitations and exercises for this work, as well as to review the matter previously seen, at least three hours of home study daily are required. Parents and guardians are, therefore, respectfully urged to insist on this application.

Communications.—Due notice should be given to the Vice-President of a change of residence, or of the contemplated withdrawal of a student.

Examinations and Premiums.—Written competitions are made by the students three times a year. The class-standing of the students, as well as the honors and premiums, are determined partly by these competitions and partly by the daily class-work, each counting one-half.

These competitions take place at the end of the months of November, January and March, the first two being followed by a public distribution of premiums and the reading of the percentages obtained by the students.

The medals and prizes given on Commencement Day are awarded in accordance with the results of the quarterly competitions. These prizes are: the medal of excellence for the highest average in the class; first and second honors for a yearly percentage of 90 and 85, respectively. Markings are on the scale of 100. An average below 75 shows an unsatisfactory standing; an average below 70 is failure to pass.

Discipline.—Though the government of the Institution is mild rather than severe, yet, for the maintaining of order and discipline, without which there can be no training nor development of character, the students are required to be obedient, earnest in study, punctual, and refined of manner; any serious neglect in these essential points rendering the offender liable to effective correction and even to dismissal.

Conduct Outside the Premises.—For faults committed outside the premises, the officers of the College do not consider themselves responsible, as students cease then to be under their jurisdiction; still, in justice to the reputation of the College, the authorities will hold students strictly accountable for offenses of this nature.

Luncheon.—Dining rooms have been fitted up for the students, and placed in charge of a reliable caterer, so that students who desire a warm luncheon at the noon hour may be able to obtain it without leaving the premises.

Students are not allowed to leave the premises between the sessions without a written request from their parents or guardians to take luncheon elsewhere.

EXPENSES.

Since the institution is not endowed, it is entirely dependent for support on the fees paid for tuition.

Tuition per session of ten months, for all classes, $60.

Students of General Chemistry and Physics pay $10 per session.

Students engaged in Laboratory work deposit $5 with the Treasurer at the beginning of the Course, to pay for chemicals and breakage.

Library fee of $1 for all.

Diplomas for Graduates in the Classical Course, $5.

For each conditional examination taken on the appointed day, a charge of $1 is made; if taken at another time, the charge is $2.

Payments for conditioned examinations must be made invariably before the examinations.

No extra charge is made for instruction in French, German or Vocal Culture.

The session is divided into quarters, which begin, respectively, about the 1st of September, the 15th of November, the 1st of February and the 15th of April.

Payments must be made quarterly or semi-annually in advance. No deduction is allowed for absence.

DEGREES.

According to the Act of the Legislature, under which St. Ignatius College was incorporated, its Board of Managers has power "to confer such academic degrees and honors as are conferred by colleges and universities of the United States."

SCHOLARSHIPS.

Friends of education who wish to donate scholarships can found one in perpetuity by giving the sum of Fifteen Hundred Dollars. Sixty Dollars will provide an annual scholarship.

The following are now held by the College:

PERPETUAL.

The Miss Eliza McConville Scholarship.
Memorial Scholarship: Margaret Gertrude Onahan.
Damen Council, 650, Knights of Columbus, Scholarship.
The Hon. William J. Onahan Scholarship.
The Hon. Charles A. Mair Scholarship.
The Hon. Thomas Brenan Scholarship.
Memorial Scholarship: Mrs. Mary White Riordan.
The Henry Venn, A. B., Class of 1906, Scholarship.
Memorial Scholarship: Mr. and Mrs. Pancratius Metz.
The Mr. and Mrs. Michael J. Riordan Scholarship.

ANNUAL.

The De Soto Council, Knights of Columbus, Scholarship.
The Rev. Henry J. Dumbach, S. J., Scholarship: Mr. Andrew Maguire.
The Illinois Council, Knights of Columbus, Scholarship.

SPECIAL PRIZES.

Intercollegiate English Prize.—A purse of $100.00 ($50.00 for the first prize, $20.00 for the second, $15.00 for the third, $10.00 for the fourth, and $5.00 for the fifth) is offered yearly by Mr. D. F. Bremner, of Chicago, for excellence in

English essay writing. The purse is open to the competition of the Jesuit Colleges of the Missouri Province, which are:

St. Louis University, St. Louis, Mo.
St. Xavier College, Cincinnati, Ohio.
St. Ignatius College, Chicago, Ill.
St. Mary's College, St. Mary's, Kan.
Creighton University, Omaha, Neb.
University of Detroit, Detroit, Mich.
Marquette University, Milwaukee, Wis.
St. John's College, Belize, British Honduras.
St. Ignatius College, Cleveland, Ohio.
St. John's University, Toledo, Ohio.
Campion College, Prairie du Chien, Wis.

Intercollegiate Latin Prize.—For the best Latin essay from competitors of the same colleges, a gold medal is offered by Very Reverend Father Provincial.

The Alumni Medal.—A gold medal for the Highest Honors of the Senior Class is offered by the Alumni Association of Loyola University.

The John Naghten Debate Medal.—Mr. John Naghten has offered a gold medal to be awarded to that member of the Loyola Oratorical Association who shall deliver the best speech in the annual Public Debate of the Society.

The Harrison Oratorical Medal.—A gold medal is offered by Hon. Carter H. Harrison, LL.D., for the best oration delivered in the Oratorical Contest, which is open to the students of the Senior, Junior, Sophomore and Freshman Classes.

The Dumbach Chemistry Medal.—A gold medal is offered in memory of Rev. Henry J. Dumbach, S. J., by Mr. An-

drew Maguire to the student who makes the best examination in Chemistry.

The Clifford Medal of Excellence.—A gold medal is offered by Hon. Richard W. Clifford for the Highest Honors in the collective branches of the Junior Class.

The Murphy Medal of Excellence.—A gold medal is offered by Dr. John B. Murphy for the Highest Honors in the collective branches in the Sophomore Class.

The Gibbons Medal of Excellence.—A gold medal is offered by Hon. John Gibbons for the Highest Honors in the collective branches in the Freshman Class.

The Joseph Magee Elocution Medal.—A gold medal is offered by Mr. Joseph Magee for excellence in Elocution.

Societies

St. Ignatius College, like other centers of learning, has always been ready to sanction and encourage such societies as tend to promote the various interests of the students. The following societies in particular are deemed worthy of special mention:

THE ALUMNI ASSOCIATION

was organized February 10, 1895. Its object is to preserve and strengthen the ties of fellow-feeling and friendship among former students of the College, and to afford them an opportunity of showing their attachment and esteem for their Alma Mater. Any graduate or student of the College, or of any Jesuit College or University, may apply for membership.

THE SODALITY

has for its object the cultivation in its members of an earnest religious spirit and a tender devotion to the Mother of God. It was established November 3, 1872. It was aggregated to the Sodality of Rome, under the title of "Our Lady Help of Christians," and under the patronage of St. Aloysius, on the 19th day of January, 1873.

THE LOYOLA ORATORICAL ASSOCIATION

was organized on the 10th of November, 1875. It affords opportunity for acquiring skill in the art of speaking, gives much useful information to its members, and develops in them a taste for literary studies. Many of the former members of this society attribute much of their success in life to the address and readiness of debate which they acquired

during their term of membership. The usual exercises at the weekly meetings are the reading of original essays and the discussion of subjects of debate approved by the President.

THE GYMNASIUM AND ATHLETIC ASSOCIATION

was formed to encourage physical exercise, and to create and foster a college spirit among the students. It has a Gymnasium which is fitted out with suitable apparatus, and in which regular instruction is given by a competent athletic instructor. The football and baseball teams do much to make college life pleasant, and the laurels they are accustomed to win on local fields are much appreciated by their fellow-students.

THE STUDENTS' LIBRARY ASSOCIATION.

The Students' Library was established with the view of forming in the students a correct literary taste, and of safeguarding them against the many dangers of indiscriminate reading. Students are strongly encouraged to supplement their regular class work by a judicious course of reading under the direction of their professor. The library has a goodly number of volumes; in connection with the library is a reading room well stocked with the standard magazines of the day.

THE ORCHESTRA.

The College Orchestra held its first rehearsal on October 2, 1900. Its purpose is to develop the musical talent of the students, and to encourage them to aim at proficiency in instrumental music.

THE GLEE CLUB

while giving pleasant recreation to its members, adds much to the enjoyment of College celebrations.

THE LOYOLA UNIVERSITY MAGAZINE

published quarterly by the students, is intended to foster literary efforts in the students of the present, to chronicle College doings and to serve as a means of intercommunication with the students of the past.

It was established in 1902.

Officers of Societies

LOYOLA UNIVERSITY ALUMNI ASSOCIATION

PRESIDENT
PAYTON J. TUOHY

VICE-PRESIDENT
CHARLES E. BYRNE

HONORARY VICE-PRESIDENTS
ANTHONY SCHAGER, '70's
JOSEPH A. CONNELL, '80's
LEO J. DOYLE, '90's
RALPH C. SULLIVAN, M. D., '00's
JOHN M. LONG, '10's

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CORRESPONDING SECRETARY
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TREASURER
M. MALACHY FOLEY

HISTORIAN
REV. WILLIAM MURPHY, D. D.

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REV. PATRICK A. MULLENS, S. J.

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EDWARD MOLLOY		JAMES LARKIN
DANIEL CUNNINGHAM		JAMES W. MAHER
WALTER QUIGLEY		J. SHERWIN MURPHY

LOYOLA ORATORICAL ASSOCIATION

PRESIDENT

REV. EUGENE A. MAGEVNEY, S. J.

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SINON J. WALSH	*Recording Secretary*	EDWARD J. DUFFY
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JOHN G. PETERSON		JOHN V. RYAN

Committee on Programs

JOSEPH SHORTALL — ALOYSIUS A. WOJCZYNSKI

SINON J. WALSH

Committee on Debates

EDWARD REYNOLDS — EDWARD J. DUFFY

JOHN POLLARD

LOYOLA UNIVERSITY MAGAZINE

Leo E. McGivena, '16, *Editor*

Associate Editors

Ernest W. Thiele, '16
James T. Mangan, '17
Edward J. Duffy, '17
George Kilgore, '18
Ignatius P. Walsh, '17
Edward D. Reynolds, '16
Edward A. Colnon, '18
Sinon J. Walsh, '18
Robert Poynton, '19

Department Editors

William F. Waugh, '16, *Law*
George T. Neuzil, '16, *Pharmacy*
J. O. Eaton, '19, *Pre-Medicine*
W. J. Pickett, '16, *Medicine*
Agnes B. Clohesy, *Sociology*
E. C. Pohlmann, '16, *Engineering*

Business Managers

Eugene Zahringer, '18
Walter Harks, '18

GENERAL ANNOUNCEMENT FOR 1915-1916.

Matriculation.—In order to facilitate the examination of new students, applicants should present themselves as soon as possible after August 15. Office hours from 9 to 12 a. m.

Entrance Examinations will be held on Friday, August 27, and Saturday, August 28.

Fall Term.—Registration.—September 1, 2. Classes begin Tuesday, September 5.

Faculty

REV. PATRICK A. MULLENS, S. J.
PHILOSOPHY

REV. ARNOLD J. GARVY, S. J.
ENGLISH LITERATURE

REV. AUGUSTINE M. EFFINGER, S. J.
POLITICAL ECONOMY
LATIN

MR. CLAUDE M. BAKEWELL, S. J.
GREEK

REV. CHARLES COPPENS, S. J.
FRENCH
HISTORY OF PHILOSOPHY
RELIGION

REV. EUGENE A. MAGEVNEY, S. J.
HISTORY

REV. JAMES L. McGEARY, S. J
PHYSICS
MATHEMATICS

REV EDWARD J. CALHOUN, S. J.
CHEMISTRY
BIOLOGY
MATHEMATICS

REV. WILLIAM P. LYONS, S. J.
RELIGION

MR. J. HARRY M. FLYNN
PUBLIC SPEAKING
ELOCUTION

MR. EDWARD J. MORGAN, S. J.
Analytical Chemistry

GEORGE L. SECORD, Ph. D.
Organic Chemistry

REV. PHILIP FROEBES, S. J.
Physics

REV. JEREMIAH O'CALLAGHAN, S. J.
English Literature

JAMES J. WALSH
Drawing

REV. JOHN KOKENGE, S. J.
German

MR. G. CAMPBELL-CHATTERTON
Assistant in German

MR. EDWARD HELFERS
Assistant in German

HERMAN RUTENBERG, Ph. D.
Assistant in Chemistry

MR. EDWIN P. GALLAGHER
Mechanical Drawing

The College

The College Course extends through four years and embraces instruction in the departments of Philosophy, Language, Literature, History, Science, and Mathematics. The aim of the course is to give the student a complete liberal education, which will train and develop all powers of the mind, and will cultivate no one faculty to an exaggerated degree at the expense of the others. The college ideal is not to foster specialization, but to cultivate the mind, to build up and strengthen true character, and to impart that accuracy of thought and reasoning and that breadth of view which must ever be the foundation as well of more advanced scholarship as of eminence in the professions or other stations in life.

ADMISSION.

All applicants for admission must present evidence of good moral character and, if they come from another college, a certificate of honorable dismissal.

Admission by Certificate.—A certificate from the principal of the high school in which a student has been prepared for college will be accepted instead of examinations in the subjects offered for admission, provided only it is made clear to the Dean of the college that such school is not of a lower grade than the preparatory department of St. Ignatius College.

Admission by Examination.—An applicant without a high school certificate will be required to pass a satisfactory examination in the required subjects mentioned below and in such other subjects from the list of electives as he may present for entrance.

REQUIREMENTS FOR ADMISSION.

All candidates for the Bachelor's degree must present entrance credits amounting to sixteen units. A unit represents a year's study in a high school subject pursued four or five times a week.

The required units for admission to the several courses are as follows:

A. B. Course.

Latin	4 units	Ancient History	1 unit
Greek	3 units*	Modern History	1 unit
English	3 units	Science	1 unit
Algebra	1 unit	Elective	1 unit
Geometry	1 unit		

B. S. Course.

English	3 units	Ancient History	1 unit
Foreign Languages	2 units	Science	2 units
Mathematics	3 units	Elective	5 units

Litt. B. Course

English	3 units	Mathematics	2 units
Foreign Languages (All in one language or two in one language and one in another.)	3 units	Ancient History	1 unit
		Modern History	1 unit
		U. S. History and Civics	1 unit
		Science	1 unit
		Elective	4 units

*Applicants who can satisfy all the other entrance requirements may be admitted with conditions in Greek, which must be removed within one year from the time of entrance. An elementary Greek class is organized for this purpose.

ELECTIVE UNITS.

The elective subjects that may be presented to complete the required sixteen units must be taken from the following list:

English Literature	1	unit
Modern Language	2	units
Foreign Language	2	units
Biology	1	unit
Chemistry	1	unit
Algebra (intermediate)	½	unit
Trigonometry	½	unit
Solid Geometry	½	unit
Physical Geography	1	unit
American History	1	unit
English History	1	unit

GENERAL STATEMENT OF THE COURSE OF STUDY FOR THE DEGREE OF A. B.

All candidates for the degree of Bachelor of Arts must before graduation complete forty semester courses,* which shall include two years of college Greek, three years of college Latin, three years of English, two years of Science in the group Physics, Chemistry, Biology, Geology, Astronomy, one year of History, one year of Mathematics, and two years of Philosophy. In addition, the candidate must do the prescribed work in Public Speaking, and, unless he can give evidence that he possesses a reading knowledge of French or German, he must take a two years' course in one of these languages. Catholic students, moreover, will be required to take every year a course in Evidences of the Christian Religion, two hours a week, which, if pursued for two years, will be accepted in satisfaction of two semester courses.

*A semester course is a subject taken at least 3 times a week for one semester.

The rest of the studies are elective in this sense that the student who wishes to pursue technical or professional courses after or even before graduation will be given full opportunity to take those studies that will best prepare him for such courses and be allowed full liberty, under proper advice, to arrange his work according to the outline of studies given below. Under certain circumstances he may be allowed to drop one of the subjects there prescribed in favor of an elective, with the approval of the committee on electives. In case the student gives no such notice of wishing to prepare for professional studies, he will be required to follow certain specified courses in Political Economy, History of Philosophy, Geology and Astronomy. Any candidate, if found deficient in English, shall, besides his other required work, take such courses as will be prescribed for him by the department of English.

SCHEDULE FOR THE A. B. COURSE.

Freshman Year.

The prescribed studies are Latin, Greek, English, Mathematics, and either Chemistry or Biology. A student who enters with four units in Mathematics will not be required to take this subject in college. He may anticipate some other course. One who enters without Physics or without Chemistry will have to take that subject in Freshman year.

1. Latin .....4 hours
2. Greek .....4 hours
3. English .....3 hours
4. Mathematics ...4 hours
5. Elective—
   Chemistry or
   Biology .....4 hours

Sophomore Year.

The required studies are Latin, Greek, English, History, and one subject from the following: A Modern Language, Mathematics, a Science (Physics, Chemistry, Biology, Ge-

ology, Astronomy), Drawing, Descriptive Geometry. A student who has no reading knowledge of French or German, will have to take either of these languages for two years during the remainder of his college course. A second Science must be taken in either Sophomore or Junior or Senior year, unless full credits for both Physics and Chemistry have been presented at entrance.

1. Latin .....4 hours
2. Greek .....4 hours
3. English .....3 hours
4. History .....3 hours
5. Elective—
   A Modern Language or a Science from the above group or Mathematics or Drawing and Descriptive Geometry .....4 hours

Junior Year.

In Junior year every student must take Latin, Logic and Ontology and English, and two subjects from the following: Mathematics, Greek, German, French, a Science (Physics, Chemistry, Biology, Geology, Astronomy), History, History of Philosophy.

1. Logic and Ontology .....5 hours
2. Latin .....3 hours
3. English .....3 hours
4-5. Elective (two to be taken—
   A Modern Language .....3 hours
   Greek, Mathematics, History, History of Philosophy, a Science (as above) .....4 hours

Senior Year.

Every Senior is required to take Psychology and Natural Theology and Ethics, and select three more subjects from the list of Junior electives, to which are added Political Economy, Sociology and Pedagogy.

1. Psychology and Natural Theology ....4 hours
2. Ethics .....4 hours

3-4-5. Elective (three to be taken)—English, Political Economy, Pedagogy, Sociology, any Elective of Junior Year.

COLLEGE CLASSES.

Freshman Class.—The object of this class is the cultivation in a special manner of literary taste and style, which is to be effected chiefly by the study of the best poets and prose writers. The Greek and Latin classics are studied for this purpose, together with such English writers as are noted for the highest qualities of literary substance and form. Special emphasis is laid on the study of poetry. Moreover, in this class, as in the others of the course, the literary work is supplemented by that training in Mathematics, Science and History which is required by a liberal education.

Sophomore Class.—The work of this year centers on the study of Oratory and Historical Composition. The nature and types of Oratory, principles of argumentation, the nature and requirements of historical writing, are thoroughly investigated—the best models, ancient and modern, forming the subject-matter of study. Thus, while perfecting literary taste, the class is intended to develop that grasp and perspective of structure without which composition on a large scale is impossible.

Junior Class.—The object of this class is to form the mind to habits of correct reason and to impart sound principles of philosophy. Logic, Rational Philosophy—being causality, the nature of matter; the human soul, its nature, origin, operation, etc.—are the chief subjects of study. The additional training received from the study of the history of

Philosophy and various literary topics is by no means neglected.

Senior Class.—The study of Philosophy is continued this year in courses on the two important subjects of Natural Theology and Ethics. These courses treating of the existence of God, the origin of Moral Obligation, the Natural Law, Duties and Rights, etc., form the crowning work of a liberal education. Their aim is to teach sound principles of conduct, to give the students clear ideas on the purpose and destiny of man, and on the problems of life and their solution, as furnished by ethical principles.

DEPARTMENT OF PHILOSOPHY.

I. LOGIC.

A. Formal Logic or Dialectics.

1. Definition. General idea of reasoning. Logic; natural and scientific.
2. Elements of Logic.
   (*a*) Material Elements. Acts of the mind; ideas, judgments, reasoning; their nature, kinds, properties and external expression.
   (*b*) Formal Element. Inference from a combination of judgments; its requisites, external expression. Principles and laws of reasoning. Forms of Argumentation.
3. Kinds of Reasoning.
   (*a*) Deductive. The Syllogism; demonstrative, probable, so phistic. Fallacies.
   (*b*) Inductive. Its nature, requisites, use and abuse.
4. How to build an argument. Invention, definition, division.
5. Method, analytic, synthetic. Science.

B. Material Logic or Criteriology.

1. Truth, its nature, kinds.
2. Logical truth; its attainment; states of the mind with regard to truth.
3. Certitude, its nature, kinds.
4. Skepticism. Kinds: Universal, Methodical Doubt, Agnosticism, Materialism, Positivism, Idealism, Christian Science, Rationalism, Traditionalism.
5. Means of attaining truth. Our cognoscitive faculties; senses, external and internal; intellect. Authority.
6. Criteria of truth; proximate, ultimate.

II. METAPHYSICS.

A. General Metaphysics or Ontology.
1. Being. Objective Concept. Essence.
2. States of Being. Existence. Possibility, internal, external. Source of internal possibility.
3. Transcendental properties of Being: one, true, good.
4. Kinds of Being: Substance and Accident.
   (*a*) Notion of Substance.
   (*b*) Nature, Individual, Supposite, Person.
5. Notion of accident.
   (*a*) Existence of accident separate from substance.
   (*b*) Species of accidents.
   (*c*) Space, place. Compenetration, Multilocation.
6. Causes of Being.
7. Perfection of Being.
   (*a*) Finite, infinite.
   (*b*) Contingent, necessary.
   (*c*) Time, Eternity.
   (*d*) Order, beauty, sublimity.

B. Special Metaphysics.
1. Cosmology.
   (*a*) Origin of the World. Materialism. Pantheism. Creation. Age of the World. Atheistic and Theistic Evolution. End of Creation.
   (*b*) Constitution of Bodies.
   (*c*) Organic bodies. Life. Degrees and Functions. Senses. Experimental psychology.
2. Rational Psychology.
   (*a*) Nature of the human soul. Union with body.
   (*b*) Properties: Spiritual, immortal.
   (*c*) Faculties: 1. Cognoscitive. Intellect. Acts. Origin of Ideas. 2. Appetite. Rational, the Will. Liberty.
3. Natural Theology.
   (*a*) God, not Nature, nor Power behind Nature, nor World soul or spirit, but a Personal Being distinct from the Universe. Pantheism, Atheism, Agnosticism.
   (*b*) His existence known not immediately, nor by intuition, nor by an innate idea, but by a posterior demonstration.
   (*c*) Essence of God. Self-existence. Necessary, Infinite, Eternal, Immutable, Immense.
   (*d*) Attributes: Unity. Simplicity. Polytheism. Dualism. Anthropomorphism. Origin of evil, Physical and Moral.
   (*e*) Knowledge of God.
   (*f*) Will of God.

(*g*) Influx into creatures. Creation. Conservation. Concourse.
(*h*) Providence. Distribution of temporal good and evil.

III. ETHICS OR MORAL PHILOSOPHY.

Definition. Truths assumed from Metaphysics.
A. General Ethics.
1. Subjective and Objective ultimate end of Man.
2. Human action. Imputability. Merit. Impediments.
3. Origin of morality of human action in the abstract and in the concrete.
4. Norm of Human Action.
(*a*) External Norm. Law, External, Natural, Positive, divine and human Obligation.
(*b*) Internal Norm. Conscience.

B. Applied Ethics.
1. Rights and Duties. Relation to others as individuals.
(*a*) Duties to God.
(*b*) Duties to Self—Suicide. Danger.
(*c*) Duties to Fellow-Men. Love. Enemies.
1. To their Souls:
(*a*) To their intellect. Lying. Mental Reservation.
(*b*) To their will.
2. To their body. Self-defense.
3. To their honor. Dueling.
4. To their property. Rights of private property in abstract. Communism. Socialism. Single Tax. Right to private property in the concrete.
5. Ways of acquiring property.
(*d*) Restitution.
2. Society. Relations to others as members of society.
(*a*) Definition of Society.
(*b*) Origin of society in the abstract. Man social by nature. Hobbes. Rousseau. In the concrete, some human fact.
(*c*) Kinds of society. Primary: the family, state and church. Secondary Societies.
(*a*) The family:
1. Marriage, of divine institution, hence, in its essentials, independent of civil authority.
2. Properties: Unity and Indissolubility; hence divorce impossible by human authority.
(*b*) Civil Society.
1. Origin in general from God. Its form determined by some human fact.
2. The family, its unit.

3. Its proximate and ultimate end.
4. Civil authority in the abstract from God; hence the absurdity of the Social Contract of Rousseau; in the concrete, determined by some human fact.
5. Forms of civil society. Stability, Liberty, true and false.
6. Tyranny. Usurpation. Transmission of civil authority.
7. Constitution, natural and written.
8. Minor societies. Right to existence and self-government.
   Secret societies. Relation to primary societies.
9. Functions of the supreme authority; legislative, judicial, executive; taxation, militia, capital punishment.
10. Social Order:
    (*a*) Material order. Political Economy.
    (*b*) Moral order. Religion. Union of State and Church. Liberty of Conscience. Toleration; dogmatic, personal, civil. Liberty of speech and of the press. Education. Common Schools.
11. Civilization.

(*c*) International Society.
1. International Law. Sources.
2. War.
3. Intervention.

(*d*) Religious Society. The Church.
1. Origin. End.
2. Nature. Rights.
3. Relation to Civil Society.
4. Supreme Authority. Independent of the State. Investiture. Secular Arm. Veto of Secular Rulers in the Election of the Pope.

The number of periods indicates the amount of time given to a subject per week. A period, unless otherwise specified, stands for fifty minutes.

LATIN.

Freshman Class. Four Periods.

Precepts: A thorough review of Latin prosody and versification.

Authors—First term: Horace, Ars Poetica; Virgil, Aeneid, books 3, 5 and 6; Livy, books 1 and 21.

Second term: Livy, books 21; Horace, Select Odes.

Sight Reading: Selections from Christian Hymnology; Livy.

Practice—Both terms: Bradley's Aids to Writing Latin Prose, Part I, and selections from Part II to Exercise 60. Two themes a week. A theme in imitation of the prose authors studied about every fortnight.

Memory: From the authors read in class.

Sophomore Class. Four Periods.

Authors—First term: Cicero, Pro Lege Manilia; Horace, Select Odes.

Second term: Horace, Epodes, Epistles and Satires; Tacitus, Agricola.

Sight Reading: Selections from the authors assigned above; Tacitus, Germania or Annals; Selections from the Latin Fathers.

Practice—Both terms: Bradley's Aids, selections from Part II, from Exercise 50 to end of book. Two themes a week. One composition every fortnight in imitation of the authors studied. Off-hand translation from English into Latin.

Memory: Select passages from the authors read.

Junior Class. Four Periods.

Authors—First term: Cicero, Quaestiones Tusculanae; Plautus, Duo Captivi; History of Latin Literature, Mackail (Scribner's), for reference. Essays in Latin, Bradley's Aids.

Second term: Cicero, Quaestiones Tusculanae, continued; Pliny, Letters; Juvenal, Selections; Selections from the Latin Fathers. Essays in Latin.

GREEK.

Freshman Class. Four Periods.

Precepts—First term: The syntax of the verb repeated; general rules of quantity in connection with the author; the Homeric dialect, cf. Kaegi-Kleist, Nos. 209-215. Brief sketch of Greek Epic and Lyric poetry. Cf. Jebb's Classical Greek Poetry.

Second term: The precepts of the first term thoroughly repeated.

Authors—Both terms: Plato, Apology or Crito; Homer, Iliad, selections from books 2, 3, 4, 6.

Sight Reading—Both terms: The New Testament or selections from the authors read in class.

Practice—Both terms: A written theme once a week, based on the authors studied and illustrating the syntax of Attic Greek or Kaegi-Kleist Exercise Book 2, Nos. 52-66.

Frequent written reviews in class.

SOPHOMORE CLASS. Four Periods.

Authors—First term: Demosthenes' Philippics. Analysis of first or third Philippic to be seen in detail.

Second term: Demosthenes on the Crown, with detailed analysis. Sophocles, Antigone, Oedipus Tyrannus or Oedipus Coloneus.

Sight Reading—Both terms: The New Testament or St. Chrysostom, Eutropius, or St. Basil.

Practice—Both terms: Easy themes built on sentences in the text, once a week. Frequent written reviews.

ENGLISH.

FRESHMAN CLASS. Three Periods.

Precepts: Literary Aesthetics; Theory of the Beautiful, of the Sublime; Taste; Imagination; Theory of Literature; Poetics; Nature and kinds of poetry; elements of poetic substance and form; characteristics of Lyric and Epic Poetry. Fiction: Constructive principles of story-writing; elements of Fiction, viz., plot, character, situation, purpose; Realism and Romanticism in Fiction; development of the English Novel.

Text-book: Coppens' Introduction, with Professor's Notes.

Texts for study: Newman's Lecture on Literature and Essay on Aristotle's Poetics; Selections from Newman, Ruskin, De Quincey, Milton, Coleridge, Wordsworth, Keats, Tennyson, DeVere.

History of English Literature and Criticism. Anglo-Saxon, Semi-Saxon, Old English and Middle English Periods; the Elizabethan Age; The Transition Period; The Classical Age.

Text-book: Jenkins' Handbook of English Literature.

Practice: One composition a week on subjects chiefly literary.

SOPHOMORE CLASS. Three Periods.

Precepts: Oratory: Nature and types of oratory; division of the oration; style in public speaking; methods of oratorical composition; principles of argumentation.

Text-book: Coppens' Art of Oratorical Composition.

History: Principles of historical composition; ethical requirements of history; representative English and American historians.

Texts for study: Burke's speech on American Taxation and Address to the Electors of Bristol; Webster's Reply to Hayne, Girard College Case, Knapp Trial, Commemorative Address on Adams and Jefferson; Newman's Second Spring. Other speeches of Webster, Calhoun and Clay. Famous French Orators.

History of English Literature and Criticism: The Romantic School of the Nineteenth Century; American Literature.

Text-book: Jenkins' Handbook of English Literature.
Practice: One composition a week. Analysis and criticism of speeches.

Junior Class. Three Periods.
Precepts: The Drama; laws and technique; theory of the Tragic; of the Comic.
Texts for study: Shakespeare's Plays; interpretation, critical and comparative study.
Practice: One composition a week for every fortnight. Essays, critical and philosophical.

Senior Class. Three Periods.
Precepts: Theory of expository writing; the critical and philosophical essay; stylistic and structural requirements; historical development of the English essay.
Texts for study: Essays of Macaulay, Newman, Brownson, Archbishop Spalding, etc. Analysis and comparative study of essays, with the emphasis laid on substance and structural organization.
Practice: One composition a week or every fortnight. Essays, chiefly critical and philosophical.

MATHEMATICS.

Freshman Class. Three Periods.
First term: Algebra, c. 22, Choice, etc., to end of book.
Second term: Analytical Geometry, four chapters to Parabola excl., supplementary propositions.

Sophomore Class. Three Periods.
First term: Analytical Geometry, Parabola to end of book.
Second term: Calculus.

Junior Class. Three Periods.
Both terms: Calculus continued and finished.
Text-books: Wentworth's Complete Algebra and Analytical Geometry; Murray's Calculus.

HISTORY.

Freshman Class. Three Periods.
This course deals with the causes which led to the revolutions against religious authority in Germany under Luther and in England under Henry VIII. It treats of the social upheavals and wars which followed from the religious rebellions. It embraces the period from the suppression of the Templars to the reign of Louis XIV.

The Renaissance; the causes of the Protestant Revolution; the Exile of the Papacy; the great Schism of the West; the Hundred Years' War; the Ottoman Empire; the Inquisition, universities, guilds.

The age of Charles V; the Protestant Revolution; Catholic Revival; wars of the Protestant Revolution; the Hugenots; Thirty Years' War.

Spain and England; Spain in the New Yorld; the Puritans; Age of Louis XIV.

Both terms: Guggenberger, History of the Christian Era, Vol. 2.

Sophomore Class. Three Periods.

This course deals with the social and political revolutions of the eighteenth and nineteenth centuries. It gives the long struggle of the people for greater rights and liberties. It begins with the Hanoverian Succession in England and ends with a brief account of contemporary history.

The Hanoverion Succession in England; the beginning of Russia; Wars of the Austrian Succession; Colonies of North America; Seven Years' War; Division of Poland.

Causes of the political and social revolutions of the eighteenth century; American War of Independence; French Revolution; Era of Napoleon; Catholic Emancipation in England.

Europe in the first half of the nineteenth century; Crimean War; Italy; Franco-German War; Civil War in the United States; great powers today; Church and State.

Both terms: Guggenberger, History of the Christian Era, Vol. 3.

Junior and Senior Classes. One Period.

Both terms: Turner's History of Philosophy.

History of Philosophy embraces the historical development and scientific correlation of philosophical systems, wtih such additional information, biographical and otherwise, as may be needful for the fuller understanding of the subject. One lecture is delivered weekly, the students being required to furnish written dissertation upon the matter treated.

Ancient Philosophy. The Vedas. Theories of Egypt and Asia. The Ionic School. The Pythagoreans. The Sophists. The Socratic School. The Epicureans. The Stoics. The Sceptics. The Syncretists and Roman Philosophy. Jewish-Alexandrian Philosophy. Neo-Phythagoreanism. Neo-Platonism. The Fathers of the Church. The Gnostics. The Schoolmen. The Mystics. The Revival of Platonism, of Aristotelianism. Arabian and Jewish Philosophy.

Modern Philosophy. Descartes and his followers: Malebranche, Spinoza, Bayle, Locke, Hume, the Encyclopaedists, Leibnitz, Wolf, Berkley, Rousseau. The Scottish School. The Transcendentalists, Kant, Fichte, Hegel, Schelling, and their Schools of Thought. Positivism, Modern Evolution Theories. The Neo-Scholastics. Thomistic Philosophy.

ASTRONOMY.

Senior Class. Three Priods.

Young's Astronomy—historical, descriptive and practical. Lectures and recitations. For reference, Clerk's History of Astronomy, Newcomb's "The Stars," Lockyear, Langley.

GEOLOGY.

General course in structural, dynamic and historical geology. Study of the geology of Illinois. Field work. Petrology and Mineralogy. The college possesses a collection of the more important minerals and rocks; in addition to this, the students have access to the Field Museum. Lectures, recitations and written exercises. For reference, Dana and Le Conte.

PHYSIOLOGY.

A course in which the student will be taught the main facts of Physiology, together with a general survey, gross and microscopic, of the mammalian organs and the fundamental mammalian tissues. Lectures, recitations, demonstrations and laboratory work. Specially adapted for those desiring to teach elementary Physiology in academies or high schools.

POLITICAL SCIENCE.

General Principles of Law: Municipal law; civil rights, contracts, real estate, criminal law. International law; its nature and authority; War and Peace, Rights and Duties of Belligerents; Rights and Duties of Neutrals.

General Principles of Government: State Governments. Constitution. Their nature, object, establishment. Departments; legislative, executive, judicial. The National Government: Origin, nature and growth. Its Function; the legislative, the judiciary, the executive.

CHEMISTRY.

Course I. General Inorganic Chemistry.—Prerequisite High School credits in Chemistry from an accredited High School or Academy.

The laboratory work aims at familiarizing the student with the

more common elements and their compounds. Moreover, it supplies the necessary empirical basis for understanding the laws and theories of Chemistry as explained in the lectures. Again, the powers of accurate observation are stimulated, and logical deduction, based on observation, inculcated.

Course II. Qualitative Analysis.—Prerequisite, Course I or its equivalent. This course aims at giving a thorough knowledge of the analytical reactions necessary for recognizing the common metals and acid radicals.

After a review of the theory of dissociation and mass action as fundamental principles of analytical procedure, balancing of equation for oxidation and reduction and methods of analysis are discussed.

Each student is required to systematize the Group manipulation from the manipulations of the individual metals. Refined inorganic tests for metals and acid radicals are included in the course.

A number of the "unknowns" are analyzed and reported on. These returns, together with repetitions and written examinations at the end of the semester, are required for full credits.

Text: Otis C. Johnson, Analytical Equation; J. Stieglitz, Qualitative Chemical Analysis, Part III.

Reference: Prescott's Johnson; J. Stieglitz, Qualitative Chemical Analysis, Parts I and II.

PHYSICS.

A continuation of the High School Course involving a more extended development of the principles of Physics, the derivation and interpretation of formulas and their application to physical problems.

(a) Mechanics and Heat.—This course corresponds to the first half of College Physics. Lectures and Laboratory, embodying the theory as well as the accurate determination of physical constants; adjustments and use of instruments of precision; verification of laws of impact, torsion, rigidity, etc., Young's Modulus, Moment of Inertia. Determination of vapor pressures and densities; freezing and boiling points; specific heats; hygrometry.

(b) Light, Sound, Electricity.—In the continuation of College Physics the same analytic method is pursued in the discussion of the theories which underlie the phenomena of these subjects, and due emphasis is placed on the important applications of waves and harmonic motion to these phenomena. The Laboratory covers the law of refraction, diffraction, spectrum analysis, photometry, polarization; stationary waves, Lissajous' curves; electrostatic induction, capacity of condenser,

measurement of resistance, operation of dynamo, motor, alternator, and transformer.

Both Semesters, Lectures and Recitations three periods a week; Laboratory, two periods a week.

Prerequisites: Plane Trigonometry, Algebra, Geometry, High School Physics.

Text: Carhart's College Physics.

EVIDENCES OF RELIGION.

Freshman Class. Two Periods. The Church as a Means of Salvation; The Last Things; The Christian's Duties Toward God, etc., Wilmer's, pp. 379 to 493, the part from p. 399 to p. 422, excl., being omitted.

Sophomore Class. Two Periods. Grace; The Sacraments, etc., Wilmer's, pp. 279 to 379.

Junior Class. One Period. The Creation of the World; the various grades of Creation, etc., Wilmer's, pp. 200 to 279; Christianity a Revealed Religion, etc., pp. 1 to 77.

Senior Class. One Period. The basis of Morality; Law as the Objective Norm of Human Actions, etc., Wilmer's, pp. 399 to 421; the Constitution of the Church, etc., Wilmer's, pp. 77 to 200.

PEDAGOGY.

As there is a growing tendency on the part of the graduates to enter the teaching profession, a course in pedagogy has been opened, which prepares the graduate to teach in high schools and normal schools, and to be principal of a four years' course high school.

Course I. The History of Education. Three hours a week, one term.

Text-book: Monroe.

A Survey of Greek and Roman Education; Plato's Republic, Aristotle's Politics, and Quintilian's Education of an Orator. Education in the Middle Ages. Drane's Christian Schools and Scholars, and Montalembert's Monks of the West. The Jesuit System of Education. Hughes and Schwickerath. La Salle, Quick, Montaigne, Locke, Rousseau, Froebel, Herbart. Present national school system.

Course II. Theory and Art of Teaching. Three hours a week, one term.

This course consists of lectures, assigned reading, informal discus-

sion and practice. It embraces school equipment, organization and management. The student will be enabled to make a thorough study of the public and private schools of the city, the high schools and normal schools.

Course III. Physiological psychology. Five hours a week, one-half term.

This is a course in applied psychology and is intended to supplement the course of rational psychology.

Definitions, Methods. Organs and their functions. Cell Tissues, Nerves, Spinal Cord, Brain. Mechanical theory of nervous action, Excitation, Inhibition and Conduction.

Correlation of Sensation and Motion. Automatic, reflex and voluntary movements. Cerebral Localization. Speech and theories of the speech center, psychological explanation of its problems.

Stimulus, Genesis of Sensation, Composition of the Sense Percept (idea)—Basis in sensation of the time and space concept. Errors in special perception, in visual perception generally; monocular and binocular vision.

Measurement of sensation intensity. Weber's, Fechner's, Merkel's Law. Time, reactions for sensation, volition, thought. Influence of attention, fatigue, rhythm.

Feeling and Emotion. Apperception, Attention, Association.

References: Wundt, Human and Animal Psychology; Grundzügeder, Physiologischen Psychologie; James, Psychology; Ladd, Outlines of Physiological Psychology; Scripture, the New Psychology; Mayer, Psychology; Tichener, Experimental Psychology; Sandford, Experimental Psychology.

Conferring of Degrees

June, 1915.

Master's Degree in Arts and Science

JAMES FITZGERALD, A. B.
THURBER M. SMITH, A. B.

Bachelor's Degree in Arts and Science

EDWARD J. AMBERG
JOSEPH W. BYRNES
EDWARD E. CAVERLEY
JAMES E. KEHOE
EARL D. KING
FRANCIS S. WARZYNSKI

Bachelor's Degree in Philosophy.

LAMBERT K. HAYES

Bachelor's Degree in Science

ELLA ROSE CONNELL
JOHN C. GILLESPIE
CELIA M. GILMORE
GEORGE W. MCCRARY
KATE MEADE
EDWARD F. TROY, M. D.

Class Honors

SENIOR CLASS

The Alumni Medal for the Highest Honors of the Class of 1915 was merited by

EDWARD J. AMBERG

JUNIOR CLASS

The John B. Murphy Medal of Excellence was merited by

ERNEST W. THIELE, 98.1

First Honors

PETER E. NOLAN, 96.4
JOHN G. PETERSON, 96
DANIEL F. CUNNINGHAM, 91.2
CLARENCE F. MURPHY, 90.8

Second Honors

JAMES P. MOLLOY, 88.4
LEO E. MCGIVENA, 87.8
PETER P. VITMANSKI, 87.3

SOPHOMORE CLASS

The Hon. John Gibbons Medal of Excellence was merited by

IGNATIUS P. WALSH, 97.8

First Honors

WALTER T. QUIGLEY, 94.6
STEPHEN A. RUTKOWSKI, 94
J. HARLAN RICHARDS, 91.6
FRANCIS T. SUJAK, 90.9
FRANCIS J. MARESH, 90.7
JAMES T. MANGAN, 90

Second Honors

JEROME JACOBSEN, 88.7
EDWARD P. MOLLOY, 87.6
EDWARD J. DUFFY, 86.6
EDWARD W. DUNNE, 85.7

FRESHMAN CLASS

The Hon. Richard W. Clifford Medal of Excellence was merited by

JOHN J. POLLARD, 95.5

First Honors

CHARLES E. PECHOUS, 95.3
WILLIAM P. HAGEDORN, 93.8
RAYMOND D. FLAVIN, 92.5
WILLIAM E. BECKMANN, 91.2
T. CYRIL CORBETT, 94.1
THOMAS G. WALSH, 93.1
WILLIAM A. FINNEGAN, 91.3
VINCENT W. CUNNINGHAM, 91

Second Honors

MARK J. CRIBBEN, 89.4
ARNOLD WEISENBURGER, 88.8
RAYMOND E. LUNDY, 86
W. JEROME BYRNES, 89.3
JOHN T. O'CONNOR, 88.2
FRANCIS J. CONRON, 86

Special Prizes

The Hon. Carter H. Harrison Oratorical Medal
SINON J. WALSH

Next in Merit
EDWARD L. COLNON

The John Naghten Debate Medal
LEO E. McGIVENA

Next in Merit
EDWARD L. COLNON

The Dumbach Chemistry Medal
STANLEY J. PROBST

Elocution Medal
SINON J. WALSH

Next in Merit
JOHN J. POLLARD

The D. F. Bremner Intercollegiate English Prize
JOSEPH W. BYRNES

The Intercollegiate Latin Prize
IGNATIUS P. WALSH

Register of Students

Name	*Candidate for Degree of*	*Class*
Allen, Thomas A.	B. S.	Freshman
Amberg, William C.	B. S.	Freshman
Barry, Lawrence M.	A. B.	Freshman
Barry, Miles E.	B. S.	Freshman
Baumer, Harry W.	B. S.	Freshman
Bauske, Carl	B. S.	Freshman
Beauvais, Ernest A.	A. B.	Junior
Beckmann, William E.	A. B.	Sophomore
Benson, John J.	A. B.	Freshman
Boe, Arnold H.	B. S.	Freshman
Boyle, Malcolm J.	A. B.	Freshman
Breen, Arthur J.	A. B.	Special
Brown, Sidney	B. S.	Freshman
Byrne, Emmett F.	B. S.	Freshman
Campbell-Chatterton, George	B. S.	Sophomore
Carey, Thomas E.	B. S.	Freshman
Carney, Philip S.	B. S.	Freshman
Case, W. D.	B. S.	Freshman
Conlon, Bernard A.	A. B.	Freshman
Colnon, Edward L.	A. B.	Sophomore
Connor, William C.	A. B.	Special
Conron, Francis J.	A. B.	Sophomore
Corbett, T. Cyril	A. B.	Sophomore
Corcoran, J. Stephen	B. S.	Sophomore
Cribben, Mark J.	A. B.	Sophomore
Cunningham, Daniel F.	A. B.	Senior
Cunningham, Vincent W.	A. B.	Sophomore
de Smet, George W.	A. B.	Freshman
Diefenbach, John	B. S.	Special
Duffy, Edward J.	A. B.	Junior
Dunn, Walter E.	A. B.	Freshman
Dusthumer, W. Vernon	B. S.	Freshman
Eaton, J. O.	B. S.	Freshman
Egan, Edward M.	B. S.	Freshman
Fey, Gerard	B. S.	Special

Name	*Candidate for Degree of*	*Class*
Feinberg, Samuel	B. S.	Freshman
Fitzgerald, John J.	A. B.	Senior
Flanagan, John J.	A. B.	Sophomore
Flavin, Raymond D.	A. B.	Sophomore
Foley, Malachy P.	A. B.	Freshman
Galarza, Maximilian	B. S.	Sophomore
Gelderman, Ferdinand	B. S.	Freshman
Gillespie, Edward S.	B. S.	Freshman
Gleason, Francis K.	A. B.	Freshman
Grace, John I.	A. B.	Freshman
Griffin, James J.	B. S.	Freshman
Gutmann, Frank J.	B. S.	Freshman
Hanrahan, James R.	A. B.	Junior
Hanrahan, William M.	B. S.	Freshman
Harks, Walter M.	A. B.	Sophomore
Harris, John	B. S.	Freshman
Hartnett, B. Emmett	B. S.	Sophomore
Heinzen, Joseph H.	A. B.	Sophomore
Helfers, Edward	B. S.	Freshman
Hoeschen, Joseph F.	B. S.	Sophomore
Holloway, Edward D.	A. B.	Freshman
Iverson, Louis	B. S.	Freshman
Johnson, Lester	B. S.	Freshman
Kech, Alphonse	B. S.	Freshman
Kerwin, Joseph F.	A. B.	Senior
Kilgore, George J.	A. B.	Sophomore
Kimball, Walter	B. S.	Freshman
Kohnen, Joseph F.	B. S.	Sophomore
Kruse, Theodore J.	B. S.	Freshman
Kussmaul, Joseph	B. S.	Freshman
Lallana, Ciriaco	B. S.	Sophomore
Lamb, Robert A.	B. S.	Freshman
Larkin, James J.	A. B.	Senior
Lassen, Harry C.	B. S.	Freshman
Lawn, Hugh E.	B. S.	Freshman
Lundy, Raymond E.	A. B.	Sophomore
Lyman, Bernard A.	B. S.	Freshman
Lynch, Raymond	B. S.	Special
McAuley, J. Vincent	B. S.	Freshman
McCauley, John B.	A. B.	Freshman
McConnell, George M.	A. B.	Sophomore
McDevitt, J. Dunlap	A. B.	Freshman

Name	*Candidate for Degree of*	*Class*
McEnery, Eugene T.	A. B.	Freshman
McGivena, Leo E.	A. B.	Senior
McNamara, J. Frank	B. S.	Freshman
Maher, James	A. B.	Senior
Malloy, John C.	A. B.	Freshman
Mangan, James T.	A. B.	Junior
Mankowski, Henry	B. S.	Freshman
Mann, Nicholas H.	A. B.	Freshman
Maresh, Francis J.	A. B.	Junior
Mayerson, Solomon	B. S.	Freshman
Minahan, Mark A.	B. S.	Freshman
Mlodzikowski, Stanley	B. S.	Sophomore
Modrzenski, Francis P.	A. B.	Sophomore
Molloy, Edward P.	A. B.	Junior
Molloy, James P.	A. B.	Senior
Moran, T. J.	B. S.	Freshman
Moran, William	B. S.	Freshman
Motsinger, Ernest	B. S.	Freshman
Mullins, Hugh W.	B. S.	Freshman
Munger, Clinton	B. S.	Freshman
Murphy, Clarence F.	A. B.	Senior
Murphy, J. Sherwin	A. B.	Sophomore
Muszynski, Walter V.	A. B.	Sophomore
Neubert, Robert A.	B. S.	Freshman
Nicholson, Edwin	B. S.	Freshman
Norton, Aloysius	B. S.	Freshman
Nulty, Francis J.	A. B.	Freshman
O'Brien, John C.	A. B.	Special
O'Neill, Emmett	A. B.	Sophomore
Passow, L. F.	B. S.	Special
Pechous, Charles E.	A. B.	Sophomore
Perlow, Samuel	B. S.	Freshman
Peterson, John G.	A. B.	Senior
Pfiffner, Clarence F.	B. S.	Freshman
Plant, Robert F.	B. S.	Freshman
Plucinski, Stanislaus	A. B.	Sophomore
Pohlman, Edward C.	B. S.	Sophomore
Pollard, John J.	A. B.	Sophomore
Poynton, Robert A.	B. S.	Freshman
Quigley, Walter T.	A. B.	Junior
Reynolds, Edward D.	A. B.	Senior
Richards, J. Harlan	A. B.	Junior

Name	*Candidate for Degree of*	*Class*
Roubic, Edward C.	B. S.	Freshman
Rudziewicz, Stanislaus G.	A. B.	Senior
Rusch, A. J.	B. S.	Freshman
Rutkowski, Stephen A.	A. B.	Junior
Ryan, John V.	A. B.	Junior
Ryan, Joseph X.	A. B.	Freshman
Ryan, Marcus C.	A. B.	Sophomore
Schoen, John W.	B. S.	Sophomore
Schultz, John F.	A. B.	Sophomore
Sheridan, Raymond E.	B. S.	Freshman
Shortall, Joseph C.	A. B.	Special
Simunich, William A.	B. S.	Freshman
Sims, Murray W.	A. B.	Sophomore
Snell, Noble R.	B. S.	Freshman
Starshak, T. Cyril	B. S.	Freshman
Stefanic, Edward J.	B. S.	Freshman
Sujak, Francis T.	A. B.	Junior
Tassie, Ralph	B. S.	Freshman
Thiele, Ernest W.	A. B.	Senior
Ure, Howard	B. S.	Freshman
Vanassek, John	B. S.	Special
Vessen, Leslie	B. S.	Sophomore
Walsh, Henry J.	A. B.	Freshman
Walsh, Ignatius	A. B.	Junior
Walsh, Sinon J.	A. B.	Sophomore
Walsh, Thomas G.	A. B.	Sophomore
Walter, Walter F.	B. S.	Sophomore
Weber, Edward J.	B. S.	Sophomore
Weisenburger, Arnold V.	A. B.	Sophomore
Welfare, Frederick G.	B. S.	Freshman
Wilcox, Leslie	B. S.	Freshman
Williamson, J. C.	B. S.	Freshman
Wojczynski, Aloysius J.	B. S.	Special
Witmanski, Peter P.	A. B.	Senior
Zahringer, Eugene V.	A. B.	Sophomore

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BULLETIN OF

Loyola University

1916-1917

Announcement of the School of Medicine

BENNETT MEDICAL COLLEGE

1358-1362 West Fulton Street

Chicago, Ill.

College Calendar 1916-1917

1916

Monday, May 29th.....Summer Term Begins.
Monday, Sept. 4th.....Labor Day; Holiday.
Monday, Sept. 18th.....Term examinations begin.
Thursday, Sept. 21st.....Entrance and Conditional Examinations Begin.
Monday, Sept. 25th.....Regular Session Begins.
Thursday, Oct. 12th.....Columbus Day; Holiday.
Thursday, Oct. 27th.....Thanksgiving Day; Holiday.
Saturday, Dec. 23d.....Christmas Vacation Begins.

1917

Tuesday, Jan. 2d.....College Work Resumed.
Monday, Jan. 15th.....Term Examinations Begin.
Monday, Jan. 29th.....Second Term Begins.
Thursday, Feb. 22d.....Washington's Birthday; Holiday.
Friday, Saturday.....Easter Holiday.
Monday, May 14th.....Term Examinations Begin.
Monday, May 28th.....Summer Term Begins.
Wednesday, May 30th.....Memorial Day; Holiday.
Monday, June 18th.....Annual Commencement.
Wednesday, July 4th.....Independence Day; Holiday.
Tuesday, Sept. 18th.....Term Examinations Begin.
Monday, Sept. 24th.....Fall Term Begins.

OFFICERS.

John B. Furay, S. J., President.
Henry Stanislaus Spalding, S. J., Regent.
Maximilian Joseph Herzog, M. D., LL. D., Dean.
Alfred de Roulet, M. Sc., M. D., Secretary.
Mary Nash, Registrar.
Josephine Leahy, Treasurer.

EXECUTIVE COMMITTEE.

Maximilian Joseph Herzog, M. D., LL. D., Dean.
Henry Stanislaus Spalding, S. J., Regent.
Alfred de Roulet, M. S., M. D., Secretary.

COUNCIL.

John B. Furay, S. J., President.
Maximilian Joseph Herzog, M. D., LL. D., Dean.
Henry Stanislaus Spalding, S. J., Regent.
Edgar Mead Reading, A. M., M. D.
Nathaniel Abraham Graves, A. B., M. D.
Hugh Neil MacKechnie, A. B., M. D., C. M., F. T. M. C.
Henry Foster Lewis, A. B., M. D.
Jacob Franklin Burkholder, M. D.
Cyrus Blazer McClurg, M. D.
Otto Charles Huber, B. S., M. D.
Frank Marion Horstman, B. S., M. D.
Felipp Kreissl, M. D.
Kazimir Ambrose Zurawski, A. B., M. D.
Ulysses Joshua Grim, M. D.
Charles Albert Wade, M. D.
Alfred de Roulet, M. S., M. D.
Henry Aaron Norden, M. D., Secretary of Council.

FACULTY.

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HENRY STANISLAUS SPALDING, S. J. REGENT.

MAXIMILIAN JOSEPH HERZOG, M. D., LL. D., Dean...59 E. Madison St.
Professor and Head of Department of Pathology, Bacteriology and Hygiene.

EDGAR MEAD READING, A. M., M. D.....6338 Kenwood Ave.
Professor of Neurology.

NATHANIEL ABRAHAM GRAVES, A. B., M. D.....2258 Walton St.
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HENRY FOSTER LEWIS, A. B., M. D.....29 E. Madison St.
Professor and Head of Department of Gynecology and Obstetrics.

JACOB FRANKLIN BURKHOLDER, M. D.....108 N. State St.
Professor and Head of Department of Ophthalmology.

ARTHUR BENNETT RANKIN, B. A., M. B.....1402 W. Monroe St.
Professor of Surgery and Director of Surgical Clinic, Jefferson Park Hospital.

OTTO CHARLES HUBER, B. S., M. D.....3361 W. Madison St.
Professor and Head of Department of Chemistry.

FELIPP KREISSL, M. D.....6 N. Wabash Ave.
Professor and Head of Department of Genito-Urinary Surgery.

ULYSSES JOSHUA GRIM, M. D.....30 N. Michigan Ave.
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FRANK MARION HORSTMAN, B. S., M. D.....528 S. Millard Ave.
Professor and Head of Department of Physiology.

HUGH NEIL MACKECHNIE, A. B., M. D., C. M., F. T. M. C.....
.....7 W. Madison St.
Professor and Head of Department of Surgery.

WILLIAM JOHN POLLOCK, B. S., M. D.....2100 W. Chicago Ave.
Professor of Medicine.

CHARLES JOSEPH WHALEN, M. A., LL. B., M. D..25 E. Washington St.
Professor of Medicine.

WILLIAM RITTENHOUSE, A. M., M. D.....31 N. State St.
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ANTON THEODORE HARRIS HOLMBOE, M. D.....3108 Logan Boul.
Professor of Orthopedic Surgery.

WILLIAM BERINGER MARCUSSON, A. M., M. D.....1551 W. Madison St.
Clinical Professor of Surgery (Jefferson Park Hospital).

FRANK BYRNES, M. D.....29 E. Madison St.
Clinical Professor of Surgery (Columbus Hospital).

CHARLES ALBERT WADE, M. D.....3218 W. Jackson Boul.
Professor of Pediatrics.

*..... Federal Bldg.
Professor of Military Surgery.

THOMAS HOGAN, LL. B.....815 Ashland Block
Professor of Medical Jurisprudence.

ARTHUR GAMMAGE, LL. B. .....835 Ashland Block
Professor of Medical Jurisprudence.

KAZIMIR AMBROSE ZURAWSKI, B. A., M. D.....32 N. State St.
Professor of Dermatology.

ALFRED DE ROULET, M. S., M. D. Secretary.....15 E. Washington St.
Professor of Gynecology.

LESLIE FREDERICK MACDIARMID, M. D.....7 W. Madison St.
Professor and Head of Department of Therapeutics.

HENRY AARON NORDEN, M. D. .....29 E. Madison St.
Professor of Medicine (Chest Diseases)

ARTHUR HENRY WEIS, M. D.....5 N. Wabash Ave.
Professor of Medicine (Gastro-Intestinal Diseases)

CYRUS BLAZER MCCLURG, M. D.....1358 W. Fulton St.
Professor and Head of Department of Anatomy.

.....
Professor of Psychiatry.

GEORGE LOUIS SECORD, M. S., Phar. D.....Loyola University
Professor of Pharmacology.

.....
Associate Professor of Pharmacology.

WILLIAM ALLEN PORTER, M. D.....7 W. Madison St.
Clinical Professor of Otology and Rhinology.

WILLARD SHERMAN BRACKEN, M. D.....104 S. Michigan Boul.
Clinical Professor of Ophthalmology.

WILLIAM KOENIG SPEICE, M. D.....1360 Fulton St.
Clinical Professor of Otology and Rhinology.

ARTHUR EDWARD LEHNER, M. D.....3001 N. Central Park Ave.
Clinical Professor of Medicine.

CHARLES AUGUSTUS BURKHOLDER, B. S., M. D.....1138 E. 63rd St.
Associate Professor of Ophthalmology.

*To be assigned by Surgeon-General of the United States Army.

GEORGE LEONARD APFELBACH, A. B., M. D.....25 E. Washington St.
Associate Professor of Medicine (Physical Diagnosis).

GEORGE DE TARNOWSKY, M. D., F. A. C. S.....30 N. Michigan Ave.
Clinical Professor of Surgery (Cook County Hospital).

WILLIAM JAMES HURLY, M. D.....6559 S. Halsted St.
Clinical Professor of Surgery.

DANIEL E. MURPHY, M. D. .....1624 Fullerton Ave.
Clinical Professor of Surgery.

JOHN BENJAMIN HAEBERLIN, M. D.....5 E. Garfield Boul.
Clinical Professor of Medicine (St. Bernard's Hospital).

THOMAS J. CONLEY, M. D.....2256 Kedzie Ave.
Clinical Professor of Surgery (Westside Hospital).

FREDERICK A. RETTIG, M. D. .....2026 Osgood St.
Clinical Professor of Medicine (Alexian Brothers Hospital).

PATRICK A. SULLIVAN, M. D.....234 Center Ave.
Clinical Professor of Surgery (St. Elizabeth's Hospital).

EDWARD PATERA, M. D.....1800 Loomis St.
Clinical Professor of Medicine (St. Mary's of Nazareth Hospital).

THOMAS A. KELLY, M. D.....7301 Kenwood Ave.
Clinical Professor of Surgery (Washington Park Hospital).

JOHN J. MEANY, M. D., F. A. C. S.....3736 W. Chicago Ave.
Clinical Professor of Surgery (St. Anne's Hospital).

JEREMIAH H. WALSH, M. D. .....3202 Washington Boul.
Clinical Professor of Surgery (St. Anne's Hospital).

WILLIAM J. ANDERSON, M. D.....2303 Milwaukee Ave.
Clinical Professor of Genito Urinary Surgery (Bridewell Hosp.).

HERMAN A. KLEIN, M. D.....5 S. Wabash Ave.
Clinical Professor of Medicine (Alexian Bros. Hospital).

THOMAS DOWNS LAFTRY, M. D. .....16 N. Kedzie Ave.
Assistant Clinical Professor of Surgery (Jefferson Park Hosp.).

CHARLES HENRY SOLOMON, M. D.....32 N. State St.
Assistant Professor of Genito Urinary Surgery.

RICHARD JAY LAMBERT, M. D., Ph. G. .....St. Charles, Ill.
Assistant Professor of Therapeutics.

BENJAMIN EDELSTEIN ELLIOTT, B. Sc., M. D.....309 E. 47th St.
Instructor in Gynecology and Demonstrator of Anatomy.

EUGENE LAWRENCE HARTIGAN, Ph.B., S. B., M. D..9154 Commercial Ave.
Instructor in Surgery.

THOMAS ALBERT CARTER, B. S., M. D. .....6619 Glenwood Ave.
Instructor in Surgery.

JOHN HARRIS WERNER, B. Sc., M. D.....822 Leland Ave.
Instructor in Bacteriology and Pathology.

FRANCES HELEN COOK, M. D.....7631 Sangamon St.
Instructor in Pediatrics.

JACK RALPH LAVIERI, M. D.....1237 W. Grand Ave.
Instructor in Gynecology.

MAXIMILIAN HERSCHLEDER, M. D.....Waukegan, Wis.
Instructor in Medicine.

COSMOS GARVEY, A. B., M. D. .....6000 Sheridan Road
Instructor in Surgery.

HERBERT WEIR GRAY, M. D. .....4500 Whipple St.
Instructor in Gynecology.

CLEVELAND CHARLES MACLANE, B. Sc., M. D. C.....1360 Fulton St.
Instructor in Pathology.

YORKE BRECKENRIDGE SUTCH, M. D. .....11112 Michigan Ave.
Instructor in Obstetrics.

JOHN ANTHONY SULDANE, M. D. .....2444 Wilcox Ave.
Instructor in Pediatrics.

ROBERT ARNOT SEMPILL, M. D. .....7 W. Madison St.
Instructor in Dermatology.

MEYER D. MOLEDEZKY, B. S., M. D.....59 E. Madison St.
Instructor in Hygiene.

ALFRED THOMAS BARRETT, M. D. .....2516 E. 74th St.
Instructor in Obstetrics.

RICHARD STARR PATILLO, M. D. .....15 E. Washington St.
Instructor in Ophthalmology.

EUGENE H. SPITZ, M. D.....29 E. Madison St.
Instructor in Gynecology.

WILLIAM J. SCHNEIDER, M. D.....4021 Prairie Ave.
Instructor in Surgery and Director of Clinic, Guardian Angel Dispensary.

WALTER SULLIVAN, A. M., M. D.....4709 Michigan Boul.
Demonstrator of Anatomy.

GEORGE F. O'CONNELL, M. D. .....1360 Fulton St.
Demonstrator of Anatomy.

JOHN KILLEEN, A. B., M. D.....104 S. Michigan Ave.
Instructor in Otology, Rhinology and Laryngology.

GEORGE MARCHMONT ROBINSON.....1360 Fulton St.
Instructor in Physiology.

MICHAEL L. GALLAGHER, M. D. .....4802 N. Western Ave.
Instructor in Physiologic Therapeutics.

ELMER HOLMES FLYNN, M. D.....3168 Ogden Ave.
Clinical Instructor in Surgery.

ROSE VORSANGER, M. D.....2354 Milwaukee Ave.
Clinical Instructor in Pediatrics.

EDWARD AUGUSTINE CORCORAN, M. D.....3159 Jackson Boul.
Clinical Instructor in Surgery.

RICHARD JOHN O'CONNELL, M. D.....3100 Logan Boul.
Clinical Instructor in Medicine.

CLIFFORD BOLLEN, M. D. .....4801 W. Madison St.
Clinical Instructor in Rhinology.

WILLIAM HENRY GEHL, M. D. .....6 N. Wabash Ave.
Clinical Instructor in Genito Urinary Surgery.

ABE F. NEMIRO, M. D.....631 S. Ashland Ave.
Clinical Instructor in Surgery (Jefferson Park Hospital).

WILLIAM WELLES HOYT, M. D.....446 E. 46th St.
Clinical Instructor in Pediatrics (Angel Guardian Dispensary).

THOMAS STEPHEN GREEN, M. D.....3900 Cottage Grove
Clinical Instructor in Gynecology (Angel Guardian Dispensary).

WILLIAM M. JOYCE, M. D. .....25 E. Washington St.
Clinical Instructor in Rhinology (Angel Guardian Dispensary).

LOUIS ROSE, M. D. .....309 E. 47th St.
Instructor in Obstetrics and Gynecology.

ORLA E. KUHN, M. D. .....2701 N. Kedzie Ave.
Clinical Instructor in Gynecology.

MAURICE W. K. BYRNE, B. Sc., M. D.....6343 Harvard Ave.
Assistant Demonstrator of Anatomy.

FRANCIS V. CARBERRY, M. D.....5453 S. Halsted St.
Instructor in Gynecology.

Undergraduate Assistants.

Anatomy:
Jay McCrary.
D. F. Monaco.

Histology:
Della Hastings.

Pathology and Bacteriology:
Benjamin Croutch.
Jesse B. Coppens.
Esther Quigley.
Bertha Gae Fischer.

Physiology:
William A. Kopprasch.
Edward Kelvalage.

Chemistry:
Alfred Fein.
S. H. Reich.
Wm. H. Bohm.

Dispensary Laboratory:
Bessie Stokes.
Alfred Fein.

GENERAL INFORMATION.

Historical.

St. Ignatius College was chartered by the Illinois State Legislature in 1869. In 1909 the college had developed to a point where the addition of new departments seemed advisable and Loyola University was accordingly incorporated.

A large tract of ground was purchased at Loyola Ave. and Lake Michigan and buildings erected for the School of Science and the Cudahy School of Engineering. Schools of Law, Sociology and Pharmacy were established in rapid succession while an affiliation was formed by which the Illinois Medical College became the Medical Department of Loyola University. In 1910 the Illinois, the Bennett and Reliance Medical Colleges merged to form the Bennett Medical College, the affiliation continuing until 1915 when the Bennett Medical College passed under the complete control of the trustees and became the Loyola University School of Medicine.

Loyola University School of Medicine.

The Medical School is now reorganized on a University basis, the Departments of Anatomy, Chemistry, Pathology and Bacteriology, Physiology and Pharmacology being in charge of professors who devote their entire time to teaching and research.

The College Building.

The building occupied by the Medical School is located in a neighborhood easily accessible and within a few blocks of Chicago's great medical center. The building is well heated, lighted and ventilated. In this building is a large amphitheatre, 3 commodious lecture rooms, the various laboratories —a large reading room and numerous smaller rooms for various purposes.

On the first floor is the Physiology Laboratory fitted with

the necessary apparatus and equipment for a thorough course in modern physiology, including animal experimentation.

Each of the ten tables is provided with complete blood staining and counting outfits, Harvard Kymographs, manometers, sphygmomanometers, Dudgeon's sphygmographs, haemocytometers, etc. By means of recently installed special equipment each table is also furnished with stimulating and timing currents, the timing current being connected with an electric clock of the latest pattern.

This laboratory is also used at present for the experimental work of the pharmacology department.

On the second floor is the Chemical Laboratory, fitted with modern desks and tables, with running water, gas hoods, and the necessary appliances for teaching organic and physiologic chemistry. The work in inorganic chemistry, qualitative and volumetric analysis is given as a college course in the School of Science.

On the third floor of the new wing is the Anatomical Laboratory. This room is well lighted, ventilated and is at all times entirely free from odor. It is liberally supplied with porcelain washstands and hot and cold water and is well provided with blackboards, charts, diagrams, models, skeletons, special dissections and all conveniences and facilities for the study of anatomy.

The laboratories devoted to Histology, Pathology and Bacteriology are located in the old building and are well equipped for teaching these sciences. Excellent microscopes are furnished each student together with necessary stains and supplies for preparing and mounting sections, making cultures, etc. The equipment also includes microtomes, refrigerators, sterilizers, incubators, electric centrifuges and all apparatus necessary for thorough scientific work.

There is an excellent Museum in connection with Pathology Laboratory. In this museum is a large and rapidly increasing collection of preparations illustrating important pathological conditions mounted in Kaiserling Crystals for class demonstration. The department of Obstetrics and Gynecology

also has an excellent teaching museum containing specimens of all the more common monsters and a number of dissections and preparations showing the normal anatomy of the female pelvis, a large collection of embryos in varying stages of development. There is also a collection of wax models showing all of the more common and many of the rarer gynecological diseases.

Each floor is provided with lecture rooms for classes, private rooms for teachers and for students who wish to devote time to advanced or research work.

Library.

The reading room on the first floor is easily accessible to the students and contains reference books, monographs, recent text books and the more important American and foreign Journals. In addition to this the students not only have free access to but are required to make constant use of the splendid medical collection in the John Crerar Library.

Clinical Facilities.

Through its affiliations with different hospitals and dispensaries the school is able to offer an abundance of practical clinical instruction.

In the Junior year students are assigned in small sections to the college dispensary, while two half days each week are spent in general clinics at the Jefferson Park Hospital. The Juniors attend autopsies at the Cook County Hospital morgue —one morning each week.

In the Senior year the student receives each week approximately 20 hours of personal clinical instruction in one or more of the hospitals associated with this school. Students are required to examine patients, write histories and do all necessary laboratory work to establish a diagnosis in the cases assigned them, as well as to outline a course of treatment, which is submitted to their instructors for criticism and correction. Small groups of students are assigned each month to the following institutions:

Cook County Hospital—2,200 beds.
Mary Crane Nursery and Hospital—out patient department.
Mercy Hospital—560 beds.
Alexian Brothers Hospital—300 beds.
St. Bernard's Hospital—200 beds.
St. Anne's Hospital—150 beds.
St. Elizabeth's Hospital—175 beds.
Norwegian Deaconess Hospital—90 beds.
St. Mary's of Nazareth Hospital—225 beds.
St. Margarets Home and Hospital—35 beds.
Lakeside Hospital—100 beds.
The Bridewell Hospital—100 beds.
The Jefferson Park Hospital—75 beds.
The Washington Park Hospital—100 beds.
The Columbus Hospital—150 beds.
The College Dispensary.
The Guardian Angel Dispensary.
The Salvation Army Dispensary.

REQUIREMENTS FOR ADMISSION.

The University offers three courses leading to the degree of Doctor of Medicine.

A Four Year Course for students who present, in addition to a four year high school diploma or its equivalent, credits for one year's college work in Chemistry, Physics and Biology.

A Five Year Course for students who present a four year high school diploma or its equivalent.

A Six Year Course for students who have completed four years high school work. This Course leads to the combined B. Sc., M. D., degree.

Students are not classified as Medical Students until the Collegiate work is completed.

Admission.

Students will be accepted by the School of Medicine upon presentation of

(a) A Bachelors Degree from an approved college or University, provided degree includes the required work in Chemistry, Physics and Biology, or

(b) Satisfactory credentials covering at least one years college work in Chemistry, Physics and Biology, in addition to four years of High School work.

High School diplomas or their equivalent will be accepted on the following terms:

The graduate of an academy or high school must present a diploma and transcript of record from an accredited school requiring for graduation the completion of a standard four year high school course which must include three (3) units of English, one (1) unit of Algebra, one (1) unit of Plain Geometry, two (2) units of a Foreign Language, and one (1) unit of American History and Civics, and at least eight units of further credit in science, history, language, literature or mathematics making a total of not less than 15 units.

A student who is not a high school graduate must present a certificate from the State Superintendent of Public Instruction which certificate must cover the 8 required units mentioned in the preceding paragraph. The remaining units may be earned by a successful examination in a sufficient number of the following subjects where the units as here indicated total at least seven: Agriculture, ½; Astronomy, ½; Bookkeeping, ½; Botany, ½; Chemistry, 1; Commercial Arithmetic, ½; Commercial Geography, ½; Domestic Science, ½; Free Hand Drawing, ½; Economics, ½; French, 1 to 4; German, 1 to 4; Greek, 1 to 3; General History, 1; English History, 1; Latin, 1 to 4; Manual training, ½; Mechanical Drawing, ½; Physics, 1; Physiography, ½; Physiology, ½; Solid Geometry, ½; Spanish, 1 to 2; Trigonometry, ½; Zoology, ½.

One unit in any subject is the equivalent of work in that subject for four or five periods per week for a school year of 36 weeks, periods to be not less than 45 minutes in length.

Time of Admission.

The school year begins September 25, 1916 and registration closes October 6th, 1916.

Grading.

The students work is graded on the scale of 100 but no numerical grades are issued. The following system of grades has been adopted:

A 90 to 100 inclusive.
B 80 to 89 inclusive.
C 75 to 79 inclusive.
D 65 to 74 inclusive.
E below 65.

A grade of D conditions the student who may take an examination at the next regular conditional examination. Failure to pass this examination constitutes a failure and the work must be repeated in class before the student is again eligible for examination.

A grade of E constitutes a failure and the work must be repeated in class.

Any student whose work is repeated by defective may be requested to withdraw from the school.

Rules Regarding Conditions and Failures.

No entrance condition may be carried into the Sophomore year.

No Freshman deficiency may be carried into the Junior Year.

No Sophomore deficiency may be carried into the Senior Year.

No Junior deficiencies may be carried into the second semester of the Senior Year.

Students who fail in any subject are required to repeat that subject again the following year, and to omit any subjects

in the advanced year's work which conflicts. Failure in more than 2 subjects means repeating the entire years work.

Special examinations for the removal of conditions can be given only by permission of the Executive Committee, and all such examinations must be given in the Dean's Office by the Heads of the Departments imposing the conditions. The fee for a special examination is five dollars.

Regular examinations for the removal of conditions are held at the end of each semester. The fee is two dollars for each subject taken.

Advanced Standing.

Time credit is given for attendance at recognized Medical Schools with requirements equal to those of Loyola University.

Students who have studied Medicine in other recognized Medical Schools may receive subject credit provided they have passed satisfactory examinations in the branches which they have completed and that they satisfy the Council that the work they have had is equal to that given in this school. No credit is given for work in C grade schools or in schools not fully recognized by the Illinois State Board of Health.

Students applying for admission to the Senior Class will be required before admission to pass all examinations in the work of the Junior Year.

General Plan of Instruction.

The curriculum in medicine extends over four years. The first two years are devoted to laboratory work in the fundamental sciences, anatomy, histology, physiology, chemistry, pathology, bacteriology, pharmacology and therapeutics. In the second year the student is given one hour each week in physical diagnosis and in minor surgery and bandaging.

The third year is devoted almost entirely to class work in medicine, surgery, obstetrics and gynecology and the more important specialities.

In the fourth year the work is principally clinical although a certain amount of didatic work is continued. Members of the Senior Class are eligible for appointments as externes, during the forenoon, in a number of the hospitals associated with the Medical School.

Requirements for Graduation.

A candidate for the degree of Doctor of Medicine must be at least 21 years of age and of good moral character.

He must have fulfilled all the requirements for admission to the Medical School.

He must give evidence of having studied Medicine for 4 full years in a recognized School of Medicine of which the last year must have been spent in the regular fourth-year course of this school.

He must pass all required examinations.

All indebtedness to the school must have been paid.

Examinations.

Term examinations on the work pursued by students are given at the end of each semester. These examinations are usually written but may be partially or wholly practical or oral at the discretion of the instructor.

The school reserves the right to revise the existing regulations regarding examinations at any time.

Fees for Regular Courses.

Matriculation fee (paid but once)	$ 5.00
Tuition fee each year	140.00
Breakage deposit (returnable)	5.00
Diploma Fee	25.00

The fees for each annual session may be paid as follows: The student electing the plan he will accept and signing a contract in case of plan B or C.

A. Payment in full on or before October 1st.

B. Payment of one-half on or before October 1st and one-half on or before February 1st. In this case $3.00 is added to the first payment.

C. Payment of one-third on or before October 1st, one-third on or before January 1st and one-third on or before March 1st. In this case $5.00 will be added to the first payment.

A student accepting plan B or C may be debarred from classes on failure to meet payments when due.

From the breakage deposit will be deducted pro rata the cost of unnecessary damage to the college building and equipment which cannot be assessed to the individual responsible. The purpose of this is to make every student a guardian of the college property. The balance remaining will be refunded at the end of each college year when keys and other college property are returned in good condition.

INTERNSHIPS.

Every Medical Student should complete his education by a service of one or two years in a good hospital before going into private practice. This is already required in two states and within a few years will probably be a prerequisite to Medical Licensure in most of the States. Graduates of this school are eligible for examinations for positions on the house staff of the County Hospital, Oak Forest Infirmary, Alexian Brothers, St. Bernard's, St. Elizabeth's, St. Anne's, St. Mary's of Nazareth, the Columbus, Washington Park, Englewood, Norwegian Deaconess, German, German Deaconess, Jefferson Park, Lakeside and West Suburban Hospitals. A number of out of town hospitals as well as several in the City appoint their internes without examination on recommendation of the authorities of the Medical School.

Internships.

Members of the 1916 class have received appointments as follows:

Alexian Brothers Hospital.
R. A. Hennessey
H. T. Swanson

Augustana Hospital.
H. O. Lindholm

Columbus Hospital.
A. H. Kegel
I. S. Haney
C. E. Boyer

Columbus Extension Hospital.
A. Sodaro
J. Pelletieri

Cook County Hospital.
H. T. Little

Douglas Hospital.
Oscar Fuentes
L. B. Highsmith
Mary Elliott

Englewood Hospital.
Wm. Wilson
Laurie E. Jordan

Garfield Park Hospital.
R. R. Kirkpatrick
F. A. Dulak
G. C. Haughey

Guardian Angel Dispensary.
Helen F. Stefanski
John Ernest Heiss

German Deaconess Hospital.
C. M. Stoycoff
R. G. Boehm
David Omens

German American Hospital.
A. G. Rasck

Hamot Hospital (Erie, Pa.).
S. L. Bossard

Illinois Central Hospital.
Henry Kruse

Jefferson Park Hospital.
C. O. Highsmith
G. A. Klein
Frank Heda
C. W. Glover

Lakeside Hospital.
E. F. Hay
E. P. Van Arsdall
S. J. Rogers
A. C. Pruner
W. D. Hall

Little Rock (Ark.) Sanitarium.
Thos. Dobbins

Mercy Hospital.
A. W. Burke
E. K. Langford

Mercy Hospital (Dubuque, Iowa).
G. E. Herschel

Norwegian Deaconess Hospital.
W. R. Read

Norwegian Tabitha Hospital.
Bessie Stokes
Noreen Sullivan
W. F. Kalicz

Oak Park Hospital.
J. C. Leonard
F. A. Passarella

People's Hospital.
E. R. Brown

Robert Burns Hospital
H. T. Swanson

St. Anthony of Padua Hospital.
H. T. Little

St. Anne's Hospital.
R. M. Kelly
W. C. Mohr

St. Bernard's Hospital.
M. W. K. Byrne
J. A. Kollar
A. F. Slaney
Wm. Dixon

St. Elizabeth's Hospital.
B. Benkendorf

St. Elizabeth's Hospital (Covington, Ky.).
L. B. Highsmith
J. M. McSparrin

St. Elizabeth's Hospital (Danville, Ill.).
S. M. Hubbard

St. Francis Hospital (Evanston).
C. F. Glasener
T. W. Plant
B. Augustus
A. J. Karal
R. H. George

St. Francis Hospital (Indianapolis).
F. E. Kunce

St. James Hospital (Chicago Heights).
L. M. Graulau

St. John's Hospital (Fargo, N. Dak.).
R. B. T. Sweany
R. W. Dailey

St. Mary's Hospital (La Salle, Ill.).
V. B. Mauricau
G. C. Goodwin

St. Vincent's Hospital (Erie, Pa.).
E. T. Hurley

San Bernardino County (Cal.) Hospital.
I. L. Finkelberg

Steel Works Hospital (Gary, Ind.).
A. P. Milliken

Toledo City Hospital (Toledo, Ohio).
R. W. Dunham
M. D. Gundrum
W. L. Brandon

West Suburban Hospital.
N. V. Graves
C. P. Harris
C. W. Trowbridge

PLAN OF INSTRUCTION.

FRESHMAN YEAR.

Subjects	Recitations	Laboratory	Total
Histology	68	136	204
Anatomy	102	306	408
Physiology	68	68	136
Chemistry, Organic	68	238	306
Materia Medica	34	...	34

SOPHOMORE YEAR.

Subjects	Recitations	Laboratory	Total
Chemistry, Physiologic	102	136	238
Pathology	34	204	238
Anatomy	68	204	272
Pharmacology and Therapeutics	68	68	136
Physiology	102	204	306
Physical Diagnosis	34	...	34
Minor Surgery	34	...	34

JUNIOR YEAR.

Subjects	Lectures	Clinics	Total
Medicine	272	34	306
Surgery	170	68	238
Obstetrics and Gynecology	170	...	170
Medical Diagnosis	68	...	68
Therapeutics	68	...	68
Pediatrics	68	...	68
Clinical Pathology	68	...	68
Dermatology	34	...	34
Autopsies	68	...	68
Ear, Nose and Throat	34	...	34
Ophthalmology	34	...	34
Dispensary Clinics	...	102	102

SENIOR YEAR.

Subjects	Lectures	Clinics	Total
Medicine	170	...	170
Surgery	170	...	170
Obstetrics and Gynecology	136	...	136
Ophthalmology	34	...	34
Rhinology	34	...	34
Neurology	68	...	68
Psychiatry	34	...	34
Dermatology	34	...	34
G. U. Surgery	34	...	34
Hygiene	34	...	34
Physiological Therapeutics	34	...	34
Orthopedic Surgery	34	...	34
Hospital Clinics	...	640	640

CHEMISTRY AND TOXICOLOGY.

Otto Charles Huber, B. S., M. D., Head of Department.
George Louis Secord, M. S., Phar. D.

Freshman.

1. *Organic Chemistry:* As an introduction to organic chemistry, the aliphatic and the aromatic series are covered and studied from the viewpoint of recent medical research in this fundamental branch of chemical science. 48 hours. Professor Huber.

Laboratory: Four hours a week, first term. As many synthetic organic compounds are made in the laboratory as time will permit. They are taken from the didatic work and are selected mainly for their illustrative importance. 64 hours. Professor Huber and assistants.

2. *Toxicology:* Lectures and recitations, three hours each week. Second term. The toxicology of both inorganic and organic poisons thoroughly studied. Professor Huber.

Laboratory: Four hours a week. Second term. Laboratory experiments are given covering identification of the various poisons as well as the quantitative estimation. Professor Huber and assistants.

Sophomore Year.

3. Physiological Chemistry, Lectures and recitations, three hours each week, throughout the year. This course covers the whole field of general physiological chemistry. Proteins, fats and carbohydrates studied in detail. The digestion of food by enzymes and digestive agents, as well as the intermediary and end products are considered. The chemistry of urine, blood, milk, etc., is thoroughly presented. 96 hours. Professor Huber.

Laboratory Work: Four hours each week, second term. Laboratory experiments are given covering the above work. These experiments include work on fats, carbohydrates, pro-

tein, enzymes, uranalysis, gastric analysis, milk analysis and fecal analysis. 128 hours. Professor Huber and assistants.

Text-Books.

Organic Chemistry—Holland, Simon, Remsen, Cole.

Physiological Chemistry: Reference—Hawk, Saxe, Holland, Purdy, Simon's Clinical Diagnosis.

Synthetic Chemistry—Cohen, Lassar-Cohn.

Toxicology—Antenreith-Warren.

DEPARTMENT OF PHYSIOLOGY.

FRANK MARION HORSTMAN, B. Sc., M. D.
GEORGE MARCHMONT ROBINSON.

The course consists of systematic lectures upon animal physiology supplemented by work in the laboratory, demonstration of experiments that cannot be carried out conveniently by the student, frequent oral or written quizzes and recitations, and the review by each student of at least one article from original literature each semester.

In the laboratory the student becomes acquainted with the use of simpler forms of physiological apparatus. He is given an opportunity to work out for himself, so far as time will permit, the fundamental experiments of physiology; to develop the power of accurate observation and description; the ability to arrange results in a logical order and to draw only warranted conclusions.

Freshman Year.

1. Physiology of Blood and Lymph, Circulation and Respiration.

Lectures and recitations two hours per week and laboratory work 2 hours per week throughout the year.

Sophomore Year.

2. Physiology of Muscle and Nerve, Digestion, Metabolism, Absorption, Secretion, Heat Production and Regulation, Internal Secretions, Central Nervous System and Special Senses.

3. Lectures and recitations three hours per week and laboratory work four hours per week throughout the year.

4. The laboratory work including animal experimentation is done almost entirely as individual experimentation by the student, graphs being made and the work thoroughly written up as the experiments are made. About 250 experiments in physiology are completed by the student in addition to the laboratory work in biology, the latter including a thorough study of the leading invertebrate and vertebrate types, with dissection of injected frogs and dogs in a detailed study of vertebrate anatomy. The work in biology makes a part of the foundation for the study of physiology in the second and third years of the course.

Texts.

Physiology—Howell; Horstman Outlines, References—Starling: Stewart; Bainbridge and Menzies; Brubaker; Halliburton.

DEPARTMENT OF ANATOMY, HISTOLOGY AND EMBRYOLOGY.

Cyrus Blazer McClurg, M. D., Head of Department.
Benjamin Edelstein Elliott, B. Sc., M. D.
George F. O'Connell, M. D.
Walter Sullivan, A. B., M. D.
Maurice W. K. Byrne, B. Sc., M. D.

The department of Anatomy is organized to provide for instruction in vertebrate anatomy, including human anatomy, histology, embryology and neurology. The courses in these branches are given in the second and third years. In the fourth

and fifth years small sections of the classes are instructed in surgical anatomy and operative surgery on the cadaver. The anatomy of the specialties, Ophthalmology, Rhineology, Otology and Laryngology, is studied under the direction of the heads of these departments.

The anatomical laboratory is situated on the top floor of the new wing. This laboratory is large and well lighted. Space is provided for twenty-five tables. Division of the classes into sections provides ample room for successful work. The courses in Histology, Embryology and Neurology are conducted in the large laboratory for microscopic anatomy, on the same floor as the dissecting room. Each student is supplied with a modern microscope and the necessary laboratory accessories.

Each student must present evidence of dissection of a lateral half of a cadaver. The work is divided into four parts: (a) Dissection of an arm; (b) Dissection of a leg; (c) Dissection of abdomen; (d) Dissection of head and neck and thorax.

Freshman Year.

(1) *General Anatomy:* An elementary course for the medical student on the anatomy of the circulatory, respiratory and gastro-intestinal organs (2 hours a week). Professor McClurg. 64 hours.

(2) *Osteology:* This course is given during the first term and consists of didactic lectures (2 hours a week) and laboratory work (2 hours a week). The student is provided with bones or models of the same for study. 64 hours.

(3) *Regional Anatomy:* A didactic course consisting of two lectures a week covering the part being dissected; laboratory work consisting of dissection, drawings and rigid quiz work. This course, comprising 16 hours a week, is continued throughout the year. Professor McClurg, Drs. O'Connell, Sullivan and Byrne. 480 hours.

(4) *Cytology, Histology and Embryology:* A brief introductory course on the structure of the cell and the classifica-

tion of tissues, followed by a systematic study of the structure of the organs and human embryology. This course is given during the second term; it consists of didactic lectures (2 hours a week) and laboratory work, consisting of staining, mounting and microscopic study of normal human tissues, illustrated by lantern demonstrations (6 hours a week). Professor McClurg and assistants. 128 hours.

Sophomore Year.

(5) *Regional Anatomy:* Didactic lectures (2 hours a week) and laboratory work (10 hours a week), covering the remaining parts to be dissected. This course is continued throughout the year. Drs. O'Connell, Sullivan and Byrne. 372 hours.

(6) *Neurology:* Didactic lectures (2 hours a week) and laboratory work (4 hours a week) during the second term. This course consists in the study of the gross anatomy of the sheep's brain and human brain and cord. Professor McClurg. 96 hours.

Junior and Senior Years.

(7) *Surgical Anatomy and Operative Surgery on the Cadaver:* This course is given in the anatomical laboratory under the direction of the department of surgery. 64 hours. Professor McKechnie.

(8) *Anatomy of the Ear, Eye, Nose and Throat:* A special course conducted under the direction of the head of this department. Professor Burkholder.

(9) *Anatomy of the Female Pelvis:* Professor De Roulet.

DEPARTMENT OF PATHOLOGY, BACTERIOLOGY AND HYGIENE.

MAXMILIAN JOSEPH HERZOG, M. D., LL. D., Head of Department.
CLEVELAND CHARLES MACLANE, B. Sc., M. D. C.
JOHN HARRIS WERNER, B. S., M. D.
MEYER D. MOLEDEZKY, B. Sc., M. D.

The laboratories for this department consist of a large, well-lighted room with ample capacity for eighty students, a research laboratory, preparation rooms and a private laboratory for the teachers of the department.

The laboratories are equipped with 75 modern Leitz microscopes (which are used in common with histology), oil immersion lenses, Leitz epidiascope, Edinger projection apparatus and all necessary material for teaching and research in Pathology and Bacteriology according to advanced standards.

In the pathological research laboratory is ample equipment for all kinds of histological work, including paraffin, celloidin and freezing methods of tissue preparations, microtomes, incubators, thermostats, reagents, stains, museum jars, glassware, etc. There is also equipment for serum and immunity work.

The material for teaching and research purposes represents carefully selected tissues from autopsies and surgical operations that have been collected for a number of years.

Material for gross demonstrations comprises a large number of museum specimens covering a great variety of special lesions and including malignant and benign new growths.

Bacteriology and Protozoology.

Sophomore Year.

(1) Two lectures per week—(32 hours).

Recitations—1 per week—(16 hours).

Laboratory: 2 periods per week at 3 hours—(96 hours).

This subject is taught in lectures and recitations and in the laboratory. The lecture course will first deal with general

bacteriology such as morphology and biology, etc. Under this head also will be taken up Ehrlich's side chain theory of immunity, the different serum reactions including the complement fixation test (Wassermann test), etc. The more important non-pathogenic and all of the important pathogenic bacteria will be studied, particularly in the laboratory course where the student will become familiar with the methods of preparing culture media, obtaining pure cultures, observing bacteria in the live state and in permanent stained specimens. The latter must be drawn and described. Such tests as the Widal test, the Wassermann test, etc., will be demonstrated and practiced by the student.

This course also includes the study of the microscopic diagnosis of rabies and of the most important microbic tropical diseases and of such protozoa as plasmodium malariae, amoeba histolytica, trypanosoma, the Donovan-Leishman bodies, piroplasma, sarcosproidia, etc. Drs. Werner and MacLane.

General and Special Pathology.

Sophomore Year.

(2) *First Semester:* General Pathology.

Two lectures per week—(32 hours).

Recitation—1 hour per week—(16 hours).

Laboratory: 2 periods per week at 3 hours—(96 hours). Professor Herzog.

(3) *Second Semester:* Special Pathology.

Two lectures per week—(32 hours).

Recitation—1 hour per week—(16 hours).

Laboratory: 2 periods per week at 3 hours—(96 hours).

Laboratory lectures and demonstrations on the intestinal parasites of man and the domestic animals.

One lecture per week—(16 hours). Professor Herzog and Dr. Werner.

The subject of Pathology is taught by systematic didactic lectures, by recitations, autopsies and in the laboratory. The

lectures will cover the whole domain of general and special pathology and they will be illustrated by means of post-mortem specimens prepared by the Kaiserling method, microscopic sections and lantern slides projected on the screen. The laboratory course in pathology is given by the professor and his assistants in connection with and following the lectures and demonstrations. Particular stress is laid upon the laboratory course in general pathology, which necessarily must form the foundation for all studies in histo-pathology. No student can ever expect to acquire any degree of skill in microscopic pathologic diagnosis unless he masters general pathologic histology. Hence the students will be required to stain and mount a complete set of 100 or more sections representing such subjects in general pathology as disturbances of circulation, thrombosis and embolism, edema, hemorrhage, necrosis, degenerative cell changes, gangrene, cloudy swelling, fatty infiltration and degeneration, fat necrosis, hyaline degenerations, cornification, petrification, ossification, pathologic pigmentation, regeneration, atrophy and hypertrophy, inflammation acute, subacute and chronic. The infectious granulomata like tuberculosis, syphilis, actinomycosis, glanders, botryomycosis, blastomycosis and finally tumors, benign and malignant, connective tissue—epithelial and mixed neoplasms will be thoroughly studied in sections. The student will be required to draw and describe each section mounted, his collection of sections and his drawings and descriptions will form part of his record and grade in pathology.

Special pathology will likewise be studied in the laboratory and the students will be required to prepare, draw and describe the sections.

The students will also be familiarized with the common methods of fixing, embedding and sectioning pathologic material, the use of the microtome, etc.

Intestinal parasites of man and the domestic animals. This subject will be taken up in laboratory lectures and demonstrations during the third year in the second term.

(4) *Autopsies:* Post-mortems are held at the Cook County Hospital by the head of the department who is one of the pathologists of this institution. Each student must attend at least thirty autopsies and he must furnish at the end of his junior year at least 30 complete post-mortem protocols of autopsies which he has attended. Pathologic material will be collected at the autopsies and will be worked up in the laboratory and studied by the students. A limited number of students will be permitted to attend autopsies held by the head of the department and his assistants in other hospitals. Professor Herzog.

Hygiene and Sanitary Science.

(5) The course in Hygiene and Sanitary Science will be given work and practical demonstrations. The subjects covered will be on the hygiene of the principal foods such as meat, milk, vegetables, beverages, on food preservation, adulteration, on air, water, sewage and their relation to disease, on ventilation, disposal of garbage, disinfection, occupational diseases, vital statistics, personal hygiene, etc. Excursions will be arranged to places of interest in connection with the didactic work. Dr. Moledezky.

Serology and Immunity.

(6) The lectures deal with the principles of immunity, the various types of immunity, the immune bodies and their method of their production, their relation to the reaction of the human body to infection, and the use of specific serum therapy in disease. The various clinical uses of the serum reactions, Wassermann reaction, Widal reaction and preparation of vaccines, are demonstrated and the student is given the opportunity to learn by practical exercise the method of the more common clinical serological methods. In other cases demonstrations are given to illustrate the various reactions of immunity, and to make more clear the mechanism of immunity. In all such demonstrations the students are given as much opportunity as possible to assist in the experiment. Dr. MacLane.

DEPARTMENT OF THERAPEUTICS AND PHARMACOLOGY.

LESLIE FREDERICK MACDIARMID, M. D., Head of Department.
GEORGE LOUIS SECORD, M. Sc., Pharm. D.
RICHARD JAY LAMBERT, Ph. G., M. D.
MICHAEL L. GALLAGHER, M. D.

The aim of the course is to give the student a practical knowledge of a comparatively limited number of drugs of acknowledged therapeutic utility. Laboratory work is emphasized, to train the student in the actual carrying out of various therapeutic procedures as well as to give him a clear idea of the general principles and of the more important phenomena involved in the study of pharmacology. The work of the department includes the study of remedial measures other than drugs, especially of physical remedies and of diet.

Required Courses—Second Year.

(1) *Prescription-Writing and Pharmacy:* Each student prepares typical specimens of each of the more important classes of pharmaceutic preparations, and practices prescribing them.

One hour laboratory work per week, *first semester.* Drs. Secord and Lambert.

(2) *Systematic Pharmacology:* Important drugs.

Lectures and recitations, two periods of one hour each per week, *second semester.* Laboratory work, one period of two hours each per week, *second semester.* Drs. Secord and Lambert.

(3) *General Therapeutics:* Remedial measures from the standpoint of the desired effect, e. g., diuresis, diaphoresis, catharsis, antipyresis, anesthesia, hypnosis, antisepsis, etc., with emphasis upon the best methods of obtaining these results.

Lectures and recitations, two periods of one hour each week throughout the year. Professor MacDearmid.

(4) *Non-Pharmacal Therapeutics:* Remedial measures other than drugs, such as psychotherapy, mechanotherapy, hydrotherapy, electrotherapy, radiotherapy, climatotherapy, and dietetics. Laboratory work in mechanotherapy and hydrotherapy, and with electrotherapeutic and roentgenologic apparatus.

Lectures and recitations, one-hour periods per week. Laboratory work, one period of one hour per week to small sections, *second semester.* Dr. Gallagher.

DEPARTMENT OF MEDICINE.

Nathaniel Abraham Graves, A. B., M. D., Head of the Department.
Charles Joseph Whalen, M. A., LL. B., M. D.
William John Pollock, B. S., M. D.
Charles Albert Wade, M. D.
Henry Aaron Norden, M. D.
Leslie Frederick MacDiarmid, M. D.
Arthur Henry Weis, M. D.
Arthur Edward Lehner, M. D.
George Leonard Apfelbach, A. B., M. D.
Frederick A. Rettig, M. D.
John Benjamin Haeberlin, M. D.
Herman A. Klein, M. D.
Richard John O'Connell, M. D.
Maximilian Herschleder, M. D.
John Anthony Suldane, M. D.
Frances Helen Cook, M. D.
Rose Vorsanger, M. D.
William Welles Hoyt, M. D.

The course in Medicine begins in the Sophomore year with the study of normal physical diagnosis, and methods of physical examination.

The work of the Junior year is devoted to building a broad foundation of the fundamental facts of the practice of medicine, special emphasis being placed in Clinical Pathology,

Symptomalogy and Diagnosis. The work consists of lectures, conferences, recitations from standard text books, together with practice in physical diagnosis and diagnostic methods in the dispensary clinics.

In the Senior year the instruction is essentially clinical and is given in the various dispensaries and hospitals connected with the school. Conferences are conducted by several of the instructors.

A thorough course in pediatrics is given in the Junior and Senior years, special stress being placed in physical diagnosis of infants and infant feeding. Lectures and quizzes on all the diseases of infancy and childhood is part of the regular course.

(1) Physical Diagnosis: Lectures and demonstrations one hour each week throughout Sophomore year. Dr. Apfelbach.

(2) General Medicine: Lectures and recitations each week during the Junior year. Professors Norden and Weis.

(3) Recitations from Text Book two hours each week throughout the Junior year. Dr. Herschleder.

(4) Pediatrics: Lectures and recitations two hours each week during the Junior year. Professor Wade and Dr. Suldane.

(5) Dispensary Practice: In sections, 24 hours for each Junior student throughout the year. Drs. Weis, Lehner and O'Connell.

(6) General Medicine: Lectures and conferences six hours each week during Senior year. Professors Graves, Whalen, Pollock, Drs. Apking and Apostolides.

(7) Medical Clinics: Sections throughout Senior year in Alexian Brothers Hospital, St. Bernard's Hospital, St. Mary's of Nazareth Hospital and Jefferson Park Hospital. Professors Graves, Rettig, Haeberlin, Patera and Klein.

(8) Dispensary Clinics: Sections—24 hours for each student throughout Senior year. Drs. Weis, Lehner, O'Connell and Apostolides.

(9) Pediatrics: Clinical conference two hours each week throughout Senior year. Professor Wade, Drs. Suldane, Cook and Vorsanger.

(10) Pediatric Clinics: Sections—48 hours for each student throughout Senior year—Mary Crane Nursery and Hospital. Dr. Suldane.

DEPARTMENT OF SURGERY.

HUGH NEIL MACKECHNIE, B. A., M. D., C. M., F. T. M. C.,
Head of Department.
WILLIAM BERINGER MARCUSSON, A. M., M. D.
ANTON THEODORE HOLMBOE, M. D.
FRANK BYRNES, M. D.
ARTHUR BENNETT RANKIN, B. A., M. B.
GEORGE DE TARNOWSKI, M. D.
BENJAMIN HARRISON BREAKSTONE, B. Sc., M. D.
WILLIAM JOSEPH HURLEY, M. D.
DANIEL E. MURPHY, M. D.
PATRICK A. SULLIVAN, M. D.
THOMAS A. KELLY, M. D.
JOHN J. MEANY, M. D.
JEREMIAH H. WALSH, M. D.
THOMAS DOWNS LAFTRY, M. D.
EUGENE LAWRENCE HARTIGAN, Ph. B., B. S., M. D.
THOMAS A. CARTER, B. Sc., M. D.
COSMAS GARVEY, A. B., M. D.
ELMER HOLMES FLYNN, M. D.
EDWARD A. CORCORAN, M. D.
WILLIAM J. SCHNEIDER, M. D.
ABRAHAM F. NEMIRO, M. D.

The course in Surgery is systematically graded. In the Sophomore year instruction in minor surgery and bandaging is given. In the Junior year recitations and lectures on the principles of surgery and surgical pathology are given. In this year there are also given two amphitheatre clinics a week and a daily dispensary clinic.

In the Senior year a course of lectures on regional surgery, and operative surgery on the cadaver and dog, and sectional clinics in hospitals are given.

1. Sophomore Year.

Recitations, demonstrations and quizzes on minor surgery and bandaging one hour a week throughout the year. Dr. Corcoran.

2. Junior Year.

(a) Principles of Surgery. Recitations and lectures four 1-hour periods a week throughout the year to sections of the class. Drs. Walsh, Hartigan, Carter, Garvey and Sullivan.

(b) Clinical Surgery. Diagnostic and operative clinic, Jefferson Park Hospital, one 2-hour period a week. Professor Rankin.

(2) Dispensary clinic, 1-hour period four days a week. Drs. Laftry, Flynn and Corcoran.

3. Senior Year.

(a) Regional Surgery. Recitations and lecture 1-hour period a week throughout the year.

October—Surgery of the Head and Neck. Dr. Murphy.

November—Surgery of the Thorax. Dr. de Tarnowsky.

December—Surgical Diseases of Joints. Dr. Hurley.

January—Surgical Diseases of Bones. Dr. Marcusson.

February—Surgery of the Stomach and Intestines. Professor Rankin.

March—Surgery of the Liver, Pancreas and Spleen. Dr. Kelly.

April—Hernia and Ileus. Professor MacKechnie.

(b) Operative Surgery on Cadaver and Dog. In sections, one 2-hour period a week. Professor MacKechnie.

(c) Clinical Surgery, Diagnostic and Operative. Sections of the class, giving each section a daily clinic as follows:

(1) Jefferson Park Hospital.

One 3-hour period a week. Professor Rankin.

One 1-hour period a week. Dr. Laftry.

One 2-hour period a week. Dr. Marcusson.

(2) **Mercy Hospital.**
Two 3-hour periods a week.

(3) **Lakeside Hospital.**
One 3-hour period a week. Professor MacKechnie.

(4) **Cook County Hospital.**
Three 2-hour periods a week. Dr. de Tarnowsky.

(5) **St. Bernard's Hospital.**
One 3-hour period a week. Dr. Hurley.

(6) **Alexian Bros. Hospital.**
Six 4-hour periods a week. Dr. Murphy.

(7) **Washington Park Hospital.**
One 2-hour period a week. Dr. Kelly.

(8) **Norwegian Deaconess Hospital.**
One 3-hour period a week. (Orthopedic.) Professor Holmboe.

(9) **St. Anne's Hospital.**
One 3-hour period a week. Drs. Meany and Walsh.

(10) **Columbus Hospital.**
One 2-hour period a week. Dr. Byrnes.

(11) **St. Elizabeth's Hospital.**
One 3-hour period a week. Dr. Sullivan.

(12) **West Side Hospital.**
One 3-hour period a week. Dr. Conley.

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY.

HENRY FOSTER LEWIS, A. B., M. D., Head of Department.
WILLIAM RITTENHOUSE, M. D.
ALFRED DE ROULET, M. S., M. D.
JACK RALPH LAVIERI, M. D.
BENJAMIN EDELSTEIN ELLIOTT, M. D.
GEORGE FRANCIS GATES, M. D.
HERBERT WEIR GRAY, M. D.
ALFRED THOMAS BARRETT, M. D.
YORKE BENJAMIN SUTCH, M. D.
EUGENE SPITZ, M. D.
LOUIS ROSE, M. D.
O. A. KUHN, M. D.
THOMAS STEPHEN GREEN, M. D.
FRANCIS V. CARBERRY, M. D.

The courses in Obstetrics and Gynecology are conducted in correlation throughout the fourth and fifth years. The instruction comprises lectures, recitations, demonstrations, out-patient and hospital clinics, and exercises with the mannikin.

Junior Year.

(1) Recitations on the Anatomy and Physiology of the Female Pelvis and Generative Organs. 16 hours. Drs. Barrett, Sutch and Spitz.

(2) Methods of Gynecological Examination and Diagnosis, Functional Gynecological Disorders. 32 hours. Drs. Barrett, Sutch and Spitz.

(3) Dispensary Clinics three times a week. Professor De Roulet, Dr. Kuhn.

(4) Lectures and Recitations on the Physiology of Pregnancy, Labor and Puerperium. 96 hours. Professor Rittenhouse and Dr. Gray.

Senior Year.

(5) Lectures and Conferences on the Pathology and Treatment of the Female Generative Organs. 64 hours. Professor De Roulet.

(6) Clinics at the Jefferson Park, Cook County and other hospitals on the Diseases of Women. 96 hours. Professor Lewis.

(7) Lectures and Conferences on the Pathology of Pregnancy, Labor and Puerperium. 64 hours. Professor Lewis and Dr. Lavieri.

(8) Clinics on Midwifery at Jefferson Park and other hospitals and at patients' homes under charge of instructors. Drs. Lavieri, Gray, Elliott and Barrett.

(9) Practical exercises on the obstetric mannikin; to the class in small sections. Drs. Gray and Elliott.

Text-books: Lewis & De Roulet's Manual of Gynecology; Eden's Manual of Obstetrics; De Normandie's Case Histories in Obstetrics; Crossen's Diseases of Women; DeLee's Obstetrics.

DEPARTMENT OF DERMATOLOGY.

KASIMIR A. ZURAWSKI, M. D., Head of the Department.
ROBERT A. SEMPILL, M. D.

Junior Year.

(1) *Lecture:* Introduction to dermatology, physiology of the skin, demonstration of histology by projection on screen. Didactic lectures thereafter, special dermatology illustrated by plates, photographs and by demonstration of patients. 32 hours.

Senior Year.

(2) *First Semester:* Lectures on syphilis of the skin and the mucous membranes with demonstration of spirochetae by dark-field illumination, and by stained specimens. Demonstration of plates and patients. 16 hours.

(3) *Second Semester:* Lectures on special dermatology; illustrated by plates, photographs and patients. 16 hours. Clinical lectures at the college or the hospitals to classes of not more than twenty students will be given throughout the year.

The department in conjunction with the department of pathology has been able to prepare a valuable collection of specimens and slides on various dermatological subjects. An exceptionally fine collection of cultures of different pathogenic fungi, especially those of interest to dermatologists.

The specimens taken at will from this collection will be studied by the students in small sections under the guidance of some of the members of the department.

Text-books: Stelwagon, Shamberg.

DEPARTMENT OF OPHTHALMOLOGY.

Jacob Franklin Burkholder, M. D., Head of the Department.
Charles Augustus Burkholder, S. B., M. D.
Willard Seymour Bracken, M. D.
Richard Starr Patillo, M. D.

The work in this department is designed to meet the requirements of those intending to become general practioners of medicine. The instruction is thoroughly practical and consists of the following courses:

Junior Year.

(1) The work in this course consists largely of laboratory exercises and clinical demonstrations. The class is arranged in small groups of students in order that each may have personal instruction. The student is drilled in the use of the ophthalmoscope and elementary refraction. One hour each week throughout the year. Dr. C. A. Burkholder.

(2) Dispensary instruction, diagnosis and treatment of the commoner diseases of the eye. Sections. 12 hours. Dr. Patillo and assistants.

Senior Year.

(3) Systematic lectures on common diseases of the eye. One hour each week throughout the year. Professor J. F. Burkholder.

(4) Clinical Ophthalmology Sections throughout the year. Professor Burkholder, Drs. Bracken and Patillo.

Text-books: May, Weeks, Fuchs.

DEPARTMENT OF RHINO-OTO-LARYNGOLOGY.

Ulysses Joshua Grim, M. D., Head of Department.
William Allen Porter, M. D.
William K. Spiece, M. D.
Clifford Bullen, M. D.
John Killeen, M. D.
William M. Joyce, M. D.

In the work of this department clinical teaching will be the special feature.

Junior Year.

Lecture once a week. 32 hours.

Clinic, one hour a week to class in sections. 32 hours.

Minor practice to sections. Drs. Porter, Spiece, Bullen and Killeen.

Senior Year.

Clinic once a week at college. 32 hours. Drs. Porter, Spiece and Bulleen.

Clinic twice a week in sections at Illinois Charitable Eye and Ear Infirmary. 64 hours. Dr. Grim.

Practical course in ear and nose surgery on cadavers and animals to advanced students. Elective. Professor Grim.

Text-books: Ballinger, St. Clair Thompson, Wendell Phillips, Gleason.

NEUROLOGY AND PSYCHIATRY.

Edgar Mead Reading, A. M., M. D., Professor of Neurology.
....., Professor of Psychiatry.

Neurology.

Instruction in Neurology is given throughout the Senior year, two hours a week being devoted to didactic lectures supplemented from time to time with clinical demonstration. Functional and occupational diseases receive the full attention which their importance demands.

Psychiatry.

The work in Psychiatry consists of one lecture each week throughout the senior year supplemented by clinical instruc-

tion in sections in the Detention Hospital and the various State institutions, the student being afforded full opportunity of observing and studying the more important types of mental disorders.

MEDICAL JURISPRUDENCE.

Henry Stanislaus Spalding, S. J.
Arthur Gammage, LL. B.
Thomas S. Hogan, LL. B.

One hour a week during the Senior year is devoted to this subject. The course includes the consideration of medical evidence, dying declarations, privileged communications, expert testimony, the legal aspects of sterility, rape, pregnancy, legitimacy, abortion, wounds, poisoning, malingering, and industrial and occupational diseases.

GENITO-URINARY SURGERY.

Felipp Kreissl, M. D., Head of the Department.
Charles Henry Solomon, M. D.
William George Anderson, M. D.
William Henry Gehl, M. D.
Charles Ely Coleman, B. S., M. D.

The work of this department is carried on by recitations and clinics throughout the Senior Year. One didactic lecture is given each week, while clinics are held daily in the College and Salvation Dispensaries. Sections of the class attend clinics at the Jefferson Park, Bridewell and other hospitals where there is an abundance of clinical material.

The student is taught the intravenous method of administering Salvarsan, the use of the urethroscope, cystoscope and other instruments employed by urologists for diagnostic and therapeutic purposes. Each student is required to examine and treat patients under the supervision of an instructor.

DISPENSARY CLINICS.

The clinic is divided into ten departments for the study of the various diseases. Every student is assigned to a given room for a stated period, when he is transferred to another, and in that way each must devote a certain portion of his time to each clinic. The members of the clinical staff are in attendance from 2 to 3 p. m. daily, throughout the year, except Sundays and holidays.

The work is so arranged as to give every student the best possible advantage in making diagnoses, outlining treatment, which includes a review in prescription writing and the physiological action of drugs. An attending physician in each room assists the student, confirming his diagnosis, writing the prescription, and quizzing over the different points of interest with each patient.

The Clinical Laboratory is also arranged in this department, where students are assigned to a period of laboratory work. In this work they get the same experience as if in a private laboratory in their own offices, making examinations of specimens which are collected throughout the clinic.

Students who fall short in their attendance in the regular clinic hours during the year must attend clinical work during the summer.

Students must conduct themselves in a decorous manner in the clinic rooms, and patients must be treated with the same consideration as in a private office.

Students are not allowed in any clinic room but that to which they are assigned, except by permission of the instructor to whom they are assigned, nor can they get credit for attendance unless they are actually present at roll call and remain in attendance.

All students entering the clinic must provide themselves with the following instruments: Clinical thermometer, stethoscope, head mirror, ear speculum, ear syringe, nasal speculum, tongue depressor, laryngoscopic mirrors, probes and applicators.

Students not providing themselves with these instruments of diagnosis will not be permitted to attend.

There will be clinics at St. Margaret's Home in Pediatrics under the charge of Dr. McCarthy; Obstetrics and Gynecology under Dr. de Roulet and house Obstetrical clinics exclusively to Loyola classes in sections of ten.

GRADUATES SEPT. 25, 1915.

Asche, Walter F.
Bucher, Clarence S.
Bailey, Charles
Buford, Robert Kind
Bedessem, Philip M.
Brunker, H. Victor
Blake, George J.
del Valle, Manuel F. Lopez
Fleischman, Joseph A.
Garrison, Herbert
Harris, Elijah G.
Holden, Alvin A.
Haworth, Dale E.
Hooten, Claud G.
Koch, Oswald F.
Langford, Marion L.
Lownick, Felix
Lucari, Emilo Cumpiana
McGuffie, Chas. R.
Neale, Vivian J.
Nolan, Eugene P.
Oakes, Fred
Ross, Joseph C.
Rivera, Frank B.
Schuettler, Arthur F.
Updike, Ernest H.
White, Clarence S.
Walter, John E.

GRADUATES, JANUARY 31, 1916.

Bronfeld, Nathan
Black, Byron Bayard
Elliott, Mary Hughes
Hay, Edward F.
Jordan, Lawrie Emmett
Peters, Roy Eliott

GRADUATES, JUNE 1, 1916.

Anderson, James V.
Augustus, Benjamin
Benkendorf, Bernard
Betthauser, Joseph R.
Boyer, Carl C. E.
Brown, Everett Rhea
Boehm, Robert Gustav
Buehler, Anna
Burke, Alexander Walter
Byrne, Maurice William Kirby
Brandon, Walter Lee
Caban, Edelmiro J.
Chiasson, Timothy
Chiasson, Marcellin J.
Cicotte, Frederick J.
Dailey, Robert Wood, Jr.
Davidson, Finis F.
Dillard, George Penn
Dixon, Willis L.
Dobbins, Thomas
Dunham, Royal Wade
Eterno, James
Fuentes, Oscar J.
Finkelberg, Ivan Lewis
Gburczyk, Frank Henry
George, Raymond Horace
Glasener, Charles F.
Glover, Charles Westley
Goodwin, Grover Cleveland
Graulau, Luis M.
Gundrum, Mark Duane
Graves, Nathaniel Van
Hartman, Perry Vernon
Hall, Walter Dawson
Haney, Irl S.
Harris, Clarence P.
Haughey, George Cornelius
Heda, Frank
Heiligenstein, Rudolph C.
Heiss, John Ernest
Henrichsen, Karl J.
Hennessey, Russell A.
Herschel, George E.
Highsmith, Luther Byrl
Honore, Sabas
Hubbard, Samuel A. Myers
Hughes, J. W.
Hurley, Edward Thomas
Jackson, Lewis L.
Jonikaitis, Joseph J.
Kadlitz, Frank S.
Kalisz, Ladislaus F.
Kan, Louis Joseph
Karalius, Anthony J.
Kegel, Arnold H.
Keho, J. Arthur
Kelly, Raymond Martin
Keshishian, Sarkis K.

Klein, George A.
Kollar, John Anton
Kruse, Henry
Kunce, Fay E.
Lequen, Jorge
Lindholm, Henning O.
Little, Harvey Thomas
Langford, Earl K.
McSparin, John Monroe
McGuire, Ralph Dean
Maurer, Frank Roy
Mauricau, Van Buren
Malloy, Francis V.
Mandulay, Bernardo
Miller, James Lyons
Modert, Alson W.
Mohr, Walter Carl
Nielsen, Carl Martin
O'Farrell, Patrick
Passarella, Frank A., Jr.
Pellettieri, John
Plant, Thomas W.
Poling, Owen
Porter, Arthur A.
Powers, Francis L.
Read, William Roscoe
Rey, He Kiung
Sarginson, Rollo B.
Schaffer, D. N.
Schallmo, Joseph E.
Showalter, Irene Helen
Soldinger, Joseph L.
Stefanski, Helen Fadora
Stokes, Bessie
Stoycoff, Christo M.
Sullivan, Noreen Marie
Swanberg, Harold
Swanson, Harry Theo
Sweany, Raymond B. T.
Szubczynski, Norbert F.
Trowbridge, Chester Warren
Van Arsdall, Ernest Payne
Van Slyke, Clifford E.
Vertin, Joseph D.
Wells, George M.
Wilson, William

FRESHMAN CLASS.

Almquist, Herman Elof
Bohm, William H.
Braginton, Fred
Burns, Frank J.
Chapman, Lille Forrest
Dybalski, John Francis
Feinberg, Isadore M.
Daugherty, Charles Mason
Jacobson, Jacob
Krol, Francis B.
Kirchof, John
Leon, Harry G.
Lowell, Jay Webb
McCrary, Jay G.
Piotrowski, Leo Joseph
Palkovic, Rudolph
Rouse, Benjamin H.
Sampolinski, Antoni Signunt
Schreiner, Otto W.
Strnad, Joseph F.
Theriault, Charles Arthur
Warshowsky, Isadore

SOPHOMORE CLASS.

Anderson, Victor James
Arthur, Esmond Russell
Becker, Peter Bryant, W-'15
Barth, Walter James
Beck, Karl Michael, S-'15
Billow, Samuel
Bolstead, Stanford Theodore
Breese, Sydney Irvin
Cunningham, James Edward
Copia, George Henry Joseph
Croutch, Benjamin Franklin S-'15
Diaz, Rudolf
Dry, Frank Mortimer, S-'15
Feldott, Harry Raymond, S-'15
Flanan, David James, S-'15
Fortney, Millard H.
Georgen, Philip C.
Goldfield, Bernard
Hastings, Della Josephine, W-'16
Halpin, Franklin J.
Heinze, Eugene P.
Kopprasch, William Albert, W-'16
Kalvelage, Edward B., W-'16
Lattman, Oswald D.
McKenzie, Hector D.
Makar, Ignatius
Morrison, Richard John

McMillen, James E.
McDonnell, Owen Joseph, W-'15
Mackowiak, Felix, W-'16
Prien, Otto Louis
Prien, Roland H.
Quigley, Esther Frances, W-'16
Reich, Stanley Henry
Reiffel, Michael I.
Ruzic, John F.
Sanderson, Melville
Sarapalius, John, W-'16
Smith, John Francis
Sosa, Juan C.
Szymkevicz, Vincent
Tierney, George Francis
Troy, John Edward
Wachlin, Edwin
Whamond, Robert Findley, W-'15
Watry, Oliver Joseph, W-'15
Wheat, Joseph H.

JUNIORS.

Alexander, Charles Burton
Altman, David Altman, W-'15
Aton, Maurice William
Axelrad, Samuel
Belensky, John J.
Berdecia, Ramon Berrios
Black, Orville E.
Brinkman, Waldo F.
Campbell, Duncan D.
Carmichael, Earle K.
Charriez, Juan Lastra
Coughlin, John P., W-'15.
Connor, Charles Henry
Coppens, Jesse Brenton, W-'15
Davidson, William Arthur
Dickinson, Charles W.
Dougherty, Leslie Dwight
Eterno, John
Eastman, Kent Lewis
Fein, Alfred
Flanders, John Aiken
Freeman, Roy Harvey
Freedman, Joseph H.
Gorecki, Helen E.
Glasco, Fred H.
Glatt, Morris A.
Greis, Rudolpf A.
Harrell, Roy W.
Haralson, Guy C.
Hernandez, Jose Antoinio, W-'15
Holmes, Lydia H.
Holland, David Lewis
Howard, William H.
Howell, Dennis Herman, W-'15
Izquerdo, Eladio, W-'15
Jusatus, Bernard Felix, W-'15.
Johannesson, Carl J.
Johnstone, James Carlyle
Johnstone, Mrs. Kristine
Jones, C. Carrol
Keeton, Robt. Taylor
Kelly, Martin J.
Lescher, Henry G.
Looney, Vernon L.
LaMarre, Victor Nazaire
MacLane, Cleveland C.
McCrary, Geo. W.
McCrosky, William Herbert
Malone, Leo Vincent
Matlock, Charles William
Matushek, William Anton
Mayer, Keith
Mix, Bronislaus
Monaco, Donat F., W-'15
Montvid, Anthony
O'Brien, Richard Joseph
O'Connell, John
O'Connor, Deno F.
Opitz, John Hoff
Otteraaen, Andrew
Palumbo, Michael A.
Phelan, Thomas F. X.
Rasmussen, Carl W. H., W-'15
Reyes, Antonio Ramon, W-'15
Reich, Ernest
Reich, Robert
Reich, Morris
Robinson, Geo. M.
Roberts, Sidney M.
Sander, Arthur S.
Schwager, Isador
Schwartz, Nathan
Serra, Jaime
Shea, Daniel E.
Sogolow, Paul B.
Sondel, Herman M.
Stoeckinger, Joseph A.
Susarrey, Xavier C.
Timms, Robert G.
Trillo, Jose B.

Turner, George Ellsworth
Walsh, James J.
Watkins, Raymond M.
Weber, John P.
Woeffel, Lucinda M.
Villalobos, Ramon M.

SENIORS.

Alba, Salvador C.
Anderson, G. Franklyn
Anderson, James V.
Augustus, Benjamin
Bengoa, Jose Tomas, W-'15
Benkendorf, Bernard
Betthauser, Joseph R.
Black, Byron Bayard, S-'14
Boehm, Robert Gustav
Bossard, Samuel LeRoy
Boyer, Carl C. E.
Brandon, Walter Lee
Bronfeld, Nathan
Brown, James Blaine
Brown, Everett Rhea
Buehler, Anna
Burke, Alexander W.
Byrne, Maurice William Kirby
Caban, Edelmiro J.
Chiasson, Joseph Paul, W-'15
Chaisson, Marcellin J.
Chiasson, Timothy
Cicotte, Fredrick Joseph
Dailey, Robert Wood
Davidson, Finis F.
DeAlarid, Leon Perez J.
Dillard, George Penn
Dixon, Willis L.
Dobbins, Thomas
Dulak, Francis A.
Dunham, Royal W.
Elliot, Mary Hughes
Eterno, James
Finkel, Morris
Finkelberg, Ivan Louis
Flanary, Milton D.
Fuentes, Oscar J.
Gburczyk, Frank Henry
Kan, Louis Joseph
Karalius, Anthony J.
Kegel, Arnold H.
Keho, J. Arthur
Kelly, Raymond Martin
Keshishian, Sarkis K.
Kirkpatrick, Robert Roscoe, W-'15
Klein, George A.
Kollar, John Anton
Kruse, Henry
Kunce, Fay E.
Langford, Earl K.
Leguen, Jorge
Leonard, Joseph Cyril
Lindholm, Henning O.
Little, Harvey Thomas
McFadden, J. T.
McGuire, Ralph Dean
McSparin, John Monroe
Malloy, Francis V.
Manduley, Bernardo
Maurer, Frank Roy
Mauricau, Van Buren
Mayer, Emil Valentine, W-'15
Miller, James L.
Milliken, Allen P.
Milner, Thos. Chapman
Mock, Frank Xavier
Modert, Alson W.
Mohr, Walter Carl
Nathanson, Israel
Nicholson, Niles Henry, W-'15
Nielsen, Carl Martin
Niggeling, Martin N.
O'Farrell, Patrick
Omens, David, W-'15
O'Neil, Joseph T.
Osborne, A. Null
Passarella, Frank A., Jr.
George, Raymond Horace
Giro, Juan B.
Glasener, Charles F.
Glover, Charles Westley
Gomberg, Harry, W-'15
Goodwin, Grover Cleveland
Gotay, Jose Belen
Graulau, Luis M.
Graves, Nathaniel Van
Gundrum, Mark D.
Hall, Walter Dawson
Haney, Irl S.
Harris, Clarence P.
Haughey, George C.
Hartman, Perry Vernon
Hay, Edward F.
Heda, Frank
Hefferan, Joseph M.

Heiligenstein, Rudolph C.
Heiss, John Ernest
Hennessey, Russell A.
Henricksen, Karl J.
Herschel, George Everritt
Highsmith, Charles Otto, W-'15
Highsmith, Luther Byrl
Hirschfeld, Sigmund
Hodgkins, Everett W.
Honore, Sabas, Jr.
Hradniansky, Charles, W-'15
Hubbard, Samuel Meyers
Hughes, Joseph W.
Hurley, Edward T.
Jackson, Lewis L.
Jarrell, Mary Wynn
Jonikaitis, Joseph J.
Jordan, Lawrie Emmett
Kadlitz, Frank S.
Kalisz, Walter F.
Pellettieri, John
Peters, Roy Eliott
Pickett, William Joseph, W-'15
Plant, Thomas W.
Poling, Owen
Porter, Arthur S.
Powers, Frank Lawrence
Provost, Benjamin W., W-'15
Pruner, A. Caskie, W-'15
Racek, Alfred G.
Rattray, John H.
Read, William Roscoe
Rey, He Kiung
Rogers, Simon J.
Sarginson, Rollo B.
Schaffer, D. N.
Schallmo, Jos. E.
Seale, William Carl
Showalter, Irene Helen
Slaney, Andrew Francis
Sodardo, Anthony, W-'15
Soldinger, Joseph L.
Stefanski, Helen Fadora
Stokes, Bessie
Stoycoff, Christo M.
Sullivan, Noreen Marie
Swanberg, Harold
Swanson, Charles A., W-'15
Swanson, Harry Theo.
Sweany, Raymond B. T.
Szubczynski, Norbert F.
Trowbridge, Chester Warren
Van Arsdall, Ernest P.
Van Slyke, Clifford E.
Vertin, Joseph D.
Wells, Geo. M.
Wilson, William
Wolfson, Max. B.

Special Information

It is desirable that students should register as early as possible, for seats in the laboratories and amphitheater are assigned in the order of registration. By remitting $5.00, students may register at any time, and thus obtain a desirable seat and precedence in the various classes.

At the request of parents the Medical School will send monthly reports of the progress of their sons. Funds may be deposited with the Treasurer, who will supervise students' expenditures on request of parents or guardians.

The Secretary will be at the college daily, where students may consult him during his office hours. New students should, if possible, send to the school in advance of the opening of the year all credentials of previous medical courses, certificates from high schools or other institutions, certificates of preparatory work done under private instruction, and all other evidences of work already done in the study of medicine, the sciences and other branches of knowledge. All credentials must remain in the hands of the Secretary throughout the period of each student's attendance.

On arriving in the city, student should proceed at once to the school building at the corner of Fulton and Ada streets, where full information in regard to board and lodging may be obtained.

Good board and lodging, near the college, can be secured at the rate of $4.00 to $6.00 per week. Students who club together can board for less. Rent is low in the neighborhood of the college, and those who bring their families will find it inexpensive to live in Chicago. For further information address

DR. ALFRED DE ROULET, *Sec'y*,
1358 West Fulton St., Chicago.
TELEPHONE, HAYMARKET 856.

Loyola University

Department of

Law

1916

Address: The Dean or Secretary
Ashland Block, Clark and Randolph Streets
Phone Central 1671

Faculty of the Law Department

REV. JOHN B. FURAY, S. J.
President of the University

REV. PATRICK A. MULLENS, S. J.
Regent of the Law Department

ARNOLD D. McMAHON, A. M., LL. B.
Acting Dean of the Law Faculty

MICHAEL J. AHERN, A. M., LL. B.
Common Law Pleading

BERNARD J. BAUMER, A. B., LL. B.
The Law of Property—Abstracts and Conveyancing

AUGUSTINE T. BOWE, A. M., LL. B.
The Law of Torts

HON. JOSEPH B. DAVID
The Law of Crimes and Criminal Procedure

JAMES J. GAUGHAN, A. M., LL. B.
The Law of Agency

HON. MICHAEL F. GIRTEN, LL. B.
The Law of Persons and Domestic Relations

JOSEPH A. GRABER, A. M., LL. B.
The Law of Suretyship—Partnership

JAMES HARTNETT, ESQ.
Lecturer on Constitutional and Elementary Law

HON. JOHN P. McGOORTY, LL. B.
Lecturer on the Law of Torts

GEORGE V. McINTYRE, LL. B.
The Law of Evidence—Equity Jurisprudence

WILLIAM C. McKENNA, A. M., LL. B.
The Law of Private Corporations

GEORGE F. MULLIGAN, A. M., LL. B.
Practice and Procedure

REV. PATRICK A. MULLENS, S. J.
Lecturer on Legal and Social Ethics

PATRICK H. O'DONNELL, LL. D.
Law of Negotiable Instruments

THOMAS J. O'HARE, ESQ.
The Law of Public Corporations

JAMES R. QUINN, A. M., LL. B.
The Law of Bailments

REV. FREDERIC SIEDENBURG, S. J.
Lecturer on Sociology

HON. JOHN J. SULLIVAN, LL. B.
Elementary Law

JOSEPH J. THOMPSON, LL. B.
Law of Insurance—Sales of Personalty

PAYTON J. TUOHY, A. M., LL. B.
The Law of Contracts—Wills and Administration

FOUNDATION.

The Law Department of Loyola University was established in September, 1908. From the beginning its success has been pronounced, and it now stands among the leading night law schools of the country. It occupies a commodious and quiet suite in the Ashland Block, Clark and Randolph Streets, in the center of Chicago's business district. The regular session for the year 1916-17 will open on September 11, 1916, at 6:30 p. m.

ADVANTAGES.

Class sessions of the Department are held in the evening from 6:30 to 9:00 o'clock, thus making it possible for young men employed in law offices to unite the advantages of a regular, scientific course in the law under experienced instructors with the practical training afforded by their daily work. This arrangement also enables those engaged in clerical and commercial positions to give their attention to their duties and at the same time prepare themselves for the practice of the profession.

The location of the Department in Chicago, the commercial and financial center of the West, presents opportunities which are unequaled elsewhere to those who must support themselves whilst pursuing their legal studies. The officers of the Department make every effort to aid its students to secure desirable employment when seasonable application for such assistance is made. Many requests for clerks are received from the leading law firms of Chicago, and the Secretary is frequently able to place students desiring such positions.

Chicago also affords innumerable advantages for the study of law in all its branches: Varied and important litigation is here being constantly carried on. Sessions of the Courts of Cook County, the Municipal Court of Chicago, and the Federal Courts are held daily thus affording to those who have leisure to attend ample opportunity of learning the trial methods of the leading lawyers at the Bar of Illinois. The library facilities of Chicago, open to students in the professions, are unsurpassed, and in addition, the Department has a library suitable for study and research at the disposal of its students.

The Department enjoys, moreover, the distinction of being the only evening law school in Chicago maintained and supported by a University. Worthy young men, whose circumstances do not permit them to give the entire day to the study of law, may here secure their professional training and receive their law degrees from a University of recognized standing.

Students in the Law Department are admitted to the musical and literary societies, to the gymnasium and athletic clubs of the University, and to the columns of its Journal on the same basis as students in the other Departments. Thus there is fostered among the law students a spirit productive of pride in their work, and an incentive is given to better and more sustained effort. This bond of intellectual fellowship will present ideals of high achievement utterly absent in an unaffiliated law school.

AIM—METHOD OF INSTRUCTION.

The aim of the Department is to give its students a thorough training, both theoretical and practical, in all branches of the law. The course of studies is so arranged as to impart that knowledge of the law which is indispensable to students in whatever jurisdiction they may intend to practice.

The fact that the class sessions are held in the evening has enabled the Department to secure the teaching services of active practitioners at the Chicago Bar. Hence, the law faculty is not committed to the exclusive use of any particular system of legal instruction; the professors have been chosen because of success in their special field, and it is not deemed wise to restrict them to any particular method of imparting the knowledge they have acquired from their study and experience. All of the professors have, however, adopted a system of instruction based on the principles of the **Ratio Studiorum.** Matter, whether text or adjudicated cases, assigned for home study is first gone over in lecture by the professor, who explains what is obscure or difficult and illustrates by practical examples the principles involved.

The student then studies the assigned matter and at the next class session is prepared for the recitation, which is an exhaustive quiz, sometimes by way of question and answer and often by the oral solution of hypothetical problems involving the principles explained and studied. The student, under this system, has ample

opportunity of learning thoroughly the law on each topic: First, from the **praelectio,** or explanation of the professor; secondly, from his own careful home study; and, lastly, from the recitation or class discussion.

REQUIREMENTS FOR ADMISSION.

Regular Students.—Applicants for admission to the Department must be not less than eighteen years of age, and must present proof of the successful completion of a four year high school course in a school of recognized standing. Graduates or students of private institutions with credits equivalent to those of high school graduates, will be admitted as regular students on proof of such credits.

At the time of matriculation, students must present proof of their preliminary education either by way of diploma or certificate, from the principal or director of the school from which they come. In no case will a student be admitted to the department who has not successfully pursued a four year high school course, or work equivalent thereto.

Advanced Standing.—Students who have successfully prosecuted a portion of their law course in a law school with equivalent courses and requirements may be admitted to the second or third year classes of the Department upon proof of such prior study.

FEES AND EXPENSES.

Matriculation.—In all cases a matriculation of Five Dollars is charged when a student is first registered. The fee is paid but once and is not returnable.

Tuition.—The tuition fee for regular students is Seventy-Five Dollars, payable quarterly in advance. A discount of Five Dollars will be allowed to students who pay the year's tuition in advance before October 1st.

Graduation.—Upon graduation of students a diploma fee of Ten Dollars will be charged.

Those desiring to take only certain courses will make arrangements with the Secretary of the Department; charges in such cases will be based on hours of classroom work.

DEGREES.

Upon successful completion of the entire regular course, as outlined, students are entitled to receive the degree of Bachelor of Laws, but before the degree is conferred each student is required to pass a satisfactory written examination embracing the whole field of the law. In preparation for this examination a review course is given in the third year class, one evening each week for the entire year. The papers in this general examination are marked by the Executive Board of the Department.

Under no circumstances will a degree in law be conferred upon a student who has not completed one entire year of work in the Department.

The Degree of Bachelor of Laws was conferred upon the following students on June 21st, 1915.

J. Stanley Bahm
William J. Bowe
Daniel J. Colgan
Leo L. Donahoe, A. B.
E. J. Dunlavy
John A. Dwan
J. F. Elward, A. B.
Thomas J. Ginnane
Robert E. Graham
Norman Green
Leo Harkins
Sylvester E. Holden
Maurice F. Leahy
John R. Lemmer, A. B.
Robert D. Lynch
John C. Malloy
Edwin E. Meister
James R. S. McCann
Thomas C. McTaggart
J. Fred Reeve, A. M.
Leo. A. Ryan, A. B
Thomas M. Ryan
Augustine L. Schaf
Leo H. Sebastian, A. B.
Eugene T. Sullivan
George D. Sullivan
Emmet Trainor
J. Edward Twomey, A. M.
Alonzo E. Ulrich
Walter A. Wade
Martin M. Ward

CLASS SESSIONS—COURSE OF STUDIES.

The regular course covers a period of three years, divided into a First, Second and Third year.

Class sessions are held on Monday, Tuesday, Wednesday and Thursday evenings from 6:30 to 9:00. Regular and punctual attendance on the part of the students and also daily preparation for class recitations are prerequisites, and delinquency in either particular will be deemed sufficient cause for cancellation of the delinquent's registration.

The quarterly system has been chosen as best adapted to the requirements of an evening law school. Each course, upon its completion, is made the subject of a searching written examination. This promotes more careful study and admits of thorough examination with less tax upon the student's endurance than a general test at the close of each year. An average of 70 per cent must be attained upon the written examination in each subject for students to continue with their classes. Those who fail to attain 70 per cent in any topic may, in the discretion of their professor, be given a second examination, but no student who fails to attain such average in two topics will be allowed such re-examination.

The following schedule shows the required law courses arranged according to years:

FIRST YEAR.

I. Elementary Law.—5 hours per week for 12 weeks.

A course on the elements of English and American law, its sources, development, scope and classification, designed to give students a general view of the law. Courts, their organizations and functions. Reporting of judicial decisions. Introductory work on use of law library.

Text: Robinson's Elementary Law.

II. The Law of Contracts.—5 hours per week for 12 weeks.

Nature of the consensual obligation—Classifications of contracts—Formation of simple contracts; offer and acceptance; agreement as affected by mistake, misrepresentation, fraud, duress and undue influence; Consideration, its historical development and modern aspect; Capacity to

contract, contracts of minors; The statute of frauds, contracts within and the satisfaction of the statute; Illegal contracts, at common law, and under modern statutes—Conditions in contracts; precedent, either express or implied and rules governing same, conditions subsequent, waiver of conditions. Formal obligations and their execution—Quasi-contractual obligations—The construction and interpretation of contracts—Operation of contracts, assignment, promises for the benefit of a third person—Discharge of contracts; By agreement, novation, and release; By operation of law, impossibility of performance, the general rule and exceptions, merger, bankruptcy, material alteration of instrument; By performance, tender; By breach; Accord and satisfaction—Parties to and measure of damages in actions on contracts.

Texts: Instructor's printed syllabus,
Huffcut and Woodruff's Cases on Contracts.

III. The Law of Torts.—5 hours per week for 12 weeks.

The law of Civil Wrongs, historical development and modern theory—Tort distinguished from crime, from breach of contract—Option to sue in Contract or Tort—Damnum absque Injuria—Injuria sine damno—Specific Torts, and defense to actions therefor: false imprisonment, malicious prosecution, abuse of process, assault and battery, criminal conversation, seduction, unlawful interference with contract, libel and slander, trespass to property, deceit, slander of title, unfair competition, nuisance, negligence, Tort Remedies—Workmen's Compensation laws—Parties to Tort actions; pleadings, evidence and measure of damages in actions for. Injunction as a tort remedy.

Text: Burdick on Torts.

IV. The Law of Crimes and Criminal Procedure.—5 hours per week for 10 weeks.

Crime defined—The Criminal Act, Intent as an element of Crime, intent in statutory offenses—Criminal Capacity—Justification for crime—Classifications—Criminal Jurisdiction, Extradition—Criminal procedure; Arrest, Examination, Commitment, Accusation by way of complaint, information and indictment; Arraignment and plea; Trial and herein of evidence in criminal cases; Verdict; Proceedings after verdict; Sentence; Writ of error. The writ of habeas corpus.

Constitutional rights of persons accused of crime—Specific criminal offenses: against the Government, against public peace, health and economy, against morality and decency, against the person, against a dwelling house, against property, maritime offenses.

Text: May on Criminal Law.

V. The Law of Property, A.—2½ hours per week for 10 weeks.

Property in general, classifications. Distinctions between real and personal property. Fixtures, emblements, burial lots, church pews. Subject matter of personal property. Title to personalty and methods of acquiring same—Original acquisition; capture, seizure, finding of lost and reclaiming of abandoned goods, treasure trove, reclamation of wild animals, accession natural and artificial, patents, copyrights, trade-marks, literary property. Act of Law: forfeiture, corporate succession, judgment, insolvency and bankruptcy, intestacy. Transfer by parties; by contract embracing sale, assignment, endorsement, bailment, etc.; by gift, inter vivos, causa mortis; by will or testament. Joint interests in personalty, classification, incidents. Suits to recover personalty, pleadings, evidence and measure of damages in actions for trespass to personalty.

Subject matter of real property, lands, tenements, hereditaments. The feudal system of tenures. Interests in realty according to quantity; freeholds of inheritance, life estates, definitions and incidents. Interests in realty according to quality, absolute and conditional estates. Interests according to time of enjoyment, estates in praesenti, in futuro. Joint interests, definitions and incidents.

Text: Instructor's Typewritten notes.
Selected American cases.

VI. The Law of Principal and Agent.—2½ hours per week for 15 weeks.

The doctrine of representation—The relation of Principal and Agent distinguished from that of Master and Servant—Creation of Agency, by appointment, by ratification, by estoppel—What acts may be done through agent—Capacity of parties, joint principals and agents—Termination of agency, by agreement, by operation of law, by revocation and renunciation.—Irrevocable agencies—Construction of Agents' authority, powers incidental and implied—Rights and liabilities between principal and third persons—Admission by agent general rule as to when competent to bind principal and when incompetent—Notice to agent, when imputed to principal. Exceptions to rule imputing knowledge to principal—Rights and Liabilities between agent and third persons—The case of Public Agents—Rights and Liabilities between principal and agents—Duties of agent to Principal—Duties of principal to agent—Sub-agents, general rules as to delegation of authority, when authority to delegate will be implied—Relation of sub-agent to principal in such case, rights of sub-agents as to remuneration, reimbursement and indemnity.

Text: Huffcut on Agency.

VII. The Sale of Goods.—2½ hours per week for 6 weeks.

Contract of sale, distinguished from other transactions; subject matter of contract, future goods, goods which have perished; the consideration, ascertainment of price, agreement to sell at valuation. Conditions and warranties defined; implied warranty of title; Caveat Emptor; implied warranty of quality in sales of goods ordered for a particular purpose known to vendor, of goods ordered by description, of articles of food, by sample, by manufacturer. Effects of the contract, when title passes, illustrations. Performance of the contract. Unpaid vendor's lien, Stoppage in transitu, re-sale. Actions for breach of the contract, remedies of the seller, remedies of buyer, measure of damages. The Statute of Frauds, contracts of sale within and satisfaction of the Statute.

Text: Benjamin's Principles of Sales.

VIII. The Law of Bailments and Carriers.—2½ hours per week for 14 weeks.

Definition. Principles common to all contracts of bailment. Roman classification, modern classification. Rights and liabilities of parties in bailments for sole benefit of bailor; in bailments for sole benefit of bailee; in mutual benefit bailments. Termination of bailments. Innkeepers, rights and liabilities as to guests, their person, their property; modern statutes affecting innkeepers' liability. Lien of innkeepers.

Common carriers of goods, their extraordinary liability; contracts limiting liability; Carriers of live stock, of baggage; Termination of extraordinary liability. Lien. Common Carriers of passengers, who are; rights and liabilities of. Actions against carriers of goods, or persons; Parties, pleadings, evidence and measure of damages.

Text: Elliott on Bailments.

IX. The Law of Persons and Domestic Relations.—2½ hours per week for 15 weeks.

Domestic relations defined and enumerated.—Husband and wife, the nature of marriage as a contract, as a status. Impediments to marriage, consent in the contract as affected by duress, fraud and mistake. Breach of contract to marry, action for and measure of damages in. The solemnization of marriage at common law, modern statutory provisions. The legal consequences of marriage, mutual duties and rights of husband and wife. The property rights of husband and wife, development of the law. Rights of surviving husband or wife in property of deceased spouse. Disabilities of coverture, modern statutory enactments. Transactions between husband and wife. Rights of action in husband or wife against third persons, for wrongs against the relation, for other wrongs. Liability of husband for

necessaries furnished wife. Dissolution of marriage, actions for divorce and separate maintenance, procedure in, and defenses to such actions.

Parent and child, legitimacy and illegitimacy. Duties and liabilities of parents: Maintenance, liability for necessaries furnished by third person; Protection; Education. Liability of parent for torts of child. Rights of parents: Custody and control; Services, emancipation; Right to recover for injuries to child, loss of service in general. Transactions between parent and child.

Guardian and Ward. Kinds of guardianship. Jurisdiction in matters of guardianship. Appointment and qualification of guardians. Powers and duties of guardians in general, as to ward's person, as to ward's estate. Transactions between guardian and ward. Accounting by guardian. Persons under special disability. Infants. Aliens. Insane persons. Spendthrifts.

Text: Long on Domestic Relations.

SECOND YEAR

X. The Law of Property, B.—2½ hours per week for 30 weeks.

The latter half of course A reviewed and amplified. The partition of joint estates. Mortgages, the common law and equitable theory, rights and liabilities of mortgagors and mortgagees, remedies and remedial rights incident to mortgages. Reversions. Remainders, estates within the rule in Shelly's case. Uses and trusts, the statute of uses, future uses. Executory devises, doctrine of perpetuity, rules against accumulation. Powers, their nature, creation and execution. Incorporeal hereditaments, rights of common, easements, franchises, rents. Licenses. Title to realty, nature and sources of. Descent, common law and modern statutory rules. Accretion, alluvion and avulsion. Adverse possession. Estoppel. Public and private grants. Common law conveyances, conveyances under statute of uses, modern statutory deeds. Deeds, their requisites and component parts. Covenants in deeds; express, implied, covenants running with the land. Involuntary alienation, eminent domain, tax titles. Title by devise, the history and development of the law of wills.

Text: Tiedeman on Real Property.

XI. Abstracts and Conveyancing.—10 hours.

Lecture and Practice Course. The survey of public lands, ranges, meridians, townships, sections, subdivisions. The recording system in general, indicii of grantors and grantees. The tract index, the record. The preparation of the abstract, what it should contain, judgment searches. Examination of specially prepared abstract. The merchantability of an

abstract. Practical exercises in preparation of contracts to sell real estate, statutory forms of deeds, warranty and quit-claim, trust deeds, etc. The Torrens system of registering titles.

XII. The Law of Evidence.—2½ hours per week for 20 weeks.

General character of American law of evidence. Questions of law and questions of fact, functions of the court and jury. The rules governing the production of evidence. Burden of proof, prima facie case. Presumptions of law, conclusive and disputable; presumptions of fact. Admissions, confessions. Leading principles of exclusion; character evidence, rule in civil and criminal cases, how proved when material; opinion evidence, matters forming subject of expert opinion; hearsay evidence, exception to rule against hearsay. Real evidence. Writings, best evidence rule; foundation for production of secondary evidence. Witnesses, qualifications of witnesses, privileged persons and communications, refreshing memory. Examination of witnesses, in chief, cross examination. Impeachment of witnesses.

Text: Hughes on Evidence.

XIII. Common Law Pleading.—2½ hours per week for 20 weeks.

History and classification of Actions: real, personal and mixed. The forms of action, their definition, division and application. Statutory actions.

Parties to actions—in general—in actions ex contractu—in actions ex delicto—misjoinder and nonjoinder.

The successive steps in a common law action. The order of pleadings. The declaration—what allegations it must contain to suit the form of action brought. The demurrer—divisions, purpose and use. The dilatory pleas—to the jurisdiction—in suspension—in abatement—their nature and purpose. Pleas in bar—The common traverse—pleas by way of confession and avoidance. Estoppel—new assignment—pleas puis darrein continuance—Repleader—Proceedings after verdict—after judgment. The rules of pleading—to effect unity—certainty—consistency and simplicity—directness and brevity—Miscellaneous rules. Extraordinary legal remedies, their history, nature and object—Mandamus—Certiorari—Quo Warranto—Prohibition—Habeas Corpus—Scire facias.

Text: Andrew Stephen's Common Law Pleading.

XIV. Equity Jurisprudence.—2½ hours per week for 22 weeks.

History and development of equity. The maxims of Equity. Its three great divisions. Equitable Titles—Trusts, their origin and history, Statute of uses, classification of trusts; Express trusts, their creation and essentials, doctrine of trusts by precatory words; implied trusts, resulting

and constructive; trusts for married women, wife's equity to a settlement; charitable trusts, their origin and characteristics, the cy-pres doctrine, rules against perpetuities and accumulations as applied to charitable trusts; Trustees, their powers and duties, jurisdiction of equity over trustees. Mortgages, the equitable theory of a mortgage, nature of the equity of redemption, foreclosure suits, rights and duties of mortgagors and mortgagees. Assignments, common law rule forbidding assignments of choses in action, equitable doctrine, rights of action of the assignee at law and in equity.

Equitable Rights: Accident defined, basis upon which relief is afforded in equity, cases in which equity relieves, lost instruments, penalties, forfeitures, defective execution of powers. Mistake defined, mistake of law, requirements precedent to relief on mistake of fact. Fraud, general nature of equitable jurisdiction in cases of fraud, Concurrent jurisdiction, distinction between relief at law and in equity, Exclusive jurisdiction; Lord Hardwicke's division of fraud, actual fraud, fraud arising from intrinsic nature of the transaction, fraud presumed from the circumstances, relations of the parties, fraud affecting third persons not parties to the agreement. Equitable doctrine of notice, its application and limitations, actual and constructive notice, lis pendens. Equitable estoppel, basis of doctrine, applications. Election, doctrine defined, circumstances under which it arises, consequences of election, applications of doctrine. Conversion and reconversion, general nature and extent of the equitable doctrine, illustrations. Adjustment, set-off, contribution, exoneration, subrogation, marshalling of assets. Equitable liens, distinctions between liens at law and in equity, instances of equitable liens.

Equitable remedies; Specific performances; Injunctions, to restrain infringement of equitable rights, to restrain proceedings at law, bills of peace and interpleader, injunctions to protect purely legal rights. Reformation, re-execution, rescission and cancellation of instruments, general principles of equitable relief, instances. Account. Partition. Bills to assign dower. Bills to establish boundaries. Partnership bills, reasons for resort to equity, accounting, dissolution, suits between firms having a common member. Creditor's bills, against debtor during lifetime, administration suits. Protection afforded estates of infants, idiots and lunatics in equity, modern American statutes. Bills for discovery, and to take testimony de bene esse, grounds of equitable jurisdiction, changes effected by modern statutes. Bills quia timet. General nature of equitable jurisdiction to appoint receivers, illustrations, powers and duties of a receiver. The writ of ne exeat.

Text: Bispham's Principles of Equity.

XV. Wills and the Administration of Decedent's Estate.—2½ hours per week for 16 weeks.

History of the law of wills and testaments; Legislative control of testamentary disposition of property, the law by which such disposition is governed. Wills distinguished from deeds, from contracts; The essential characteristics of a will, animus testandi, revocability. Statutory requirements in general and their satisfaction, nuncupative wills. Who may make a will, capacity as affected by mistake, fraud, duress, and undue influence. What can be disposed of by will. Who can take under a will, statutes of mortmain, modern law. Revocation of wills: by specific act manifest on face of will; by a later will, distinction between will and codicil; by act of the law. Alteration of wills, republication. Probate of Will and the contest thereof. Construction of wills. Lapsed, void and adeemed legacies. Classes of legacies, abatement of legacies, order of abatement. Satisfaction of legacies. Renunciation by widows and election to take under statute.

Practical administration of decedent's estate: testate decedent, petition for probate and letters testamentary, the hearing, proof in solemn form, executor's bond, issuance of letters testamentary; intestate decedent, application for letters of administration, who is entitled to administer, bond of administrator, issuance of letters. Procedure subsequent to issuance of letters testamentary and of administration; Taking possession of decedent's personal property, citation to compel delivery of assets. Inventory of property, including legal description of real estate. Appraisement of personal assets, allowance of widow's and child's award, widow's selection; Publishing for claims, adjudication term, order of adjudication, procedure in case of claims filed after adjudication term, hearing and allowance or refusal of claims, classes of claims. Sale of real estate on insufficiency of personal assets to pay claims, procedure and decree. Final account, notice, objections, hearings; Final order.

Text: Rood on Wills.
Instructor's Typewritten Notes.

XVI. The Law of Partnership.—2½ hours per week for 12 weeks.

Definitions and distinctions. Purposes for which a partnership may be created. Who may be partners. The contract of partnership and the evidence thereof. The tests of partnership, between parties themselves, as to third persons. Incidents of partnership, articles of agreement, firm name, good will, the firm capital, property of the firm. Rights and duties of partners toward each other. Actions between partners, at law, in equity. The powers of partners, as between themselves, as between firm and third persons. Liability of partners for acts of co-partner, in con-

tract, in tort. Liability of co-partnership for acts of agents and servants. Nature and extent of the liability of partners. Actions by and against the firm. Termination of partnership. Dissolution, Notice, effect of upon powers of partners. Application of partnership assets. Final accounting. Limited partnerships.

Text: Mechem's Elements of Partnership.

XVII. The Law of Suretyship.—2½ hours per week for 18 weeks.

Suretyship in general, definitions and distinctions. Real suretyship. Consideration for the suretyship contract. Incapacity of parties as affecting the contract. Offer of guaranty, its acceptance and nature thereof. Principal or surety competent but not bound: conditional execution and unauthorized delivery; fraud, duress, illegality and other matters affecting assent and execution. Legal requirements as to form of contract, statute of frauds. Construction and interpretation of the contract. General and special, continuing and non-continuing, limited and unlimited guaranties. Negotiability and assignabilty of contracts of suretyship and guaranty.

Surety's right to re-imbursement or indemnity. The right of subrogation. Contribution between co-sureties, defenses to actions for. Subrogation as to co-sureties. Surety's right to send creditor against the principal or to compel principal to exonerate him. When demand on principal and notice of default is necessary to charge surety or guarantor. Payment and satisfaction or tender by principal as discharge of surety. Discharge by operation of law. Alteration of principal's contract or surety's risk without consent of surety. Release of surety by extension of time to principal. Loss or surrender of securities by the creditor. Official bonds. Bonds in the course of judicial proceedings.

Text: Spencer on Suretyship.

XVIII. The Law of Negotiable Instruments.—2½ hours per week for 10 weeks.

General characteristics of negotiable instruments, the law merchant. Form and interpretation of negotiable instruments. Consideration of negotiable instruments, as it affects bona fide ownership. Negotiation, classes of indorsement, the indorser's undertaking. Rights of holders, what constitutes a holder in due course. Liability of parties, those primarily liable, those secondarily liable. Presentment for payment, time and place, waiver. Notice of dishonor, form of notice, to whom and how given, waiver. Discharge of negotiable instruments.

Bills of Exchange, their form and interpretation. Acceptance of bills,

presentment for acceptance, protest, acceptance supra protest. Payment for honor, rights of payor.

Promissory notes and checks, defined, presentment of checks, effect of certification. Actions on negotiable instruments.

Text: Bunker on Negotiable Instruments.

THIRD YEAR

XIX. Practice and Procedure.--2½ hours per week for 18 weeks.

Commencement of actions, ordinary suits at law; actions in attachment, replevin, garnishment, and forcible entry and detainer. Bail in civil cases. Security for costs, suits in forma pauperis. Preparation of brief on the facts, on the law.

Appearance of defendant, the practice in default cases, setting aside defaults.

The pleadings: Declaration, practice in drawing in leading common law actions. Plea, what may be shown under the general issue in each action, what must be specially pleaded. Demurrers, general and special, disposition of.

Amendments. Motions of course, contested motions. Putting case at issue. Trial: Examination of jurors, challenges. Opening statement. Production of evidence, prima facie case in each form of action. Motion to direct verdict. Evidence in defense, rebuttal. Closing arguments. Instructions to jury. Verdicts, general and special. Proceedings after verdict and before judgment. Judgment, appeal, writ of error. Judgments by confession. Practice in entering, and proceedings to vacate.

The case in the appellate tribunal, practice. Abstract of record, brief, oral argument. The decision of the higher court, proceedings on affirmance, on reversal.

Removal of causes from State to Federal Courts. Practice and Procedure in Federal Courts. Appellate practice. Removing case from State Supreme Court to Supreme Court of the United States.

Texts: Instructor's Notes; Smith's Court to Court.

XX. Equity Pleading and Practice.—2½ hours per week for 20 weeks.

Nature of equity and common law jurisdiction, stare decisis. Parties to the bill, necessary parties, proper parties. Process, service and return. Appearance. Form and requisites of the bill. Bills not original. Demurrers. Pleas, pure, mixed, negative. Answer, as a defense, as furnishing discovery. Replication. Amendments, supplemental pleadings and in-

terrogatories. Evidence in chancery. Motions of course and motions not of course. The hearing. Decrees and decretal orders, final, interlocutory. Masters in chancery, references, reports, objections, exceptions. Injunctions, Receivers. The review of decrees by courts of appellate jurisdiction. Equity practice in the Federal Courts.

Text: Rush, Equity Pleading and Practice.

XXI. The Law of Insurance.—2½ hours per week for 10 weeks.

History and development of insurance. Nature and requisites of the insurance contract, parties, insurable interest, the consideration. Representations and Warranties. Agents and their powers. Waiver and estoppel. The standard fire policy. Terms of the life policy. Marine insurance. Accident and health insurance. Guaranty, credit and liability insurance.

Text: Thompson on Insurance.

XXII. The Law of Private Corporations.—2½ hours per week for 20 weeks.

Corporations defined and classified. The creation and organization of Corporations, general corporation laws, their requirements and compliance therewith. Promotion of Corporate enterprises. The Corporation as a legal entity, as a citizen. De facto corporations, collateral attack upon, and the doctrine of estoppel. The corporate charter, as a contract, the construction of corporate grants. Powers of a corporation, incidental powers, particular powers. Acts ultra vires, general rule, its basis, Estoppel to assert defense of ultra vires. Corporate liability for torts and crimes, history and growth of the law. Right of corporation to exercise its powers in foreign state, the rules of comity. Power of state over foreign corporations, modern statutes and compliance therewith.

Membership in non-stock corporations, in stock corporations.

Capital and capital stock distinguished.

Shares of stock, classes of stock.

Stock subscription contracts. Rights of holders of stock, to participate in management, to inspect records, to dividends. Transfer of shares.

Corporate meeting and elections. The management of corporations, express and implied powers of officers and agents.

The liability of stockholders. Dissolution of Corporations.

Text: Keener's Cases on Corporations.

XXIII. The Law of Public Corporations.—2½ hours per week for 12 weeks

Nature of municipal corporations; creation, alteration, and dissolution; legislative control in general; administration of government in gen-

eral; departments, including governmental functions, quasi-governmental functions and commercial functions; powers; acquiring, holding and dealing with property; liability for torts; liability of contracts; remedies of creditors.

Text: Elliott on Municipal Corporations.

XXIV. Constitutional Law.—2½ hours per week for 20 weeks.

The relation of the states to the national government. The establishment and amendment of constitutions. Construction and interpretation of constitutions. The three departments of government, their relation to each other, checks and balances. General jurisdiction of the national government. Due process of law, equal protection of laws, police power, taxation, eminent domain, power to regulate commerce, ex post facto laws, law impairing the obligations of contracts.

Text: Boyd's Cases on Constitutional Law.

XXV. Conflict of Laws.—2½ hours per week for 12 weeks.

Jurisdiction: sources of law and comity; territorial jurisdiction; jurisdiction in rem and in personam. Remedies, rights of action and procedure. Creation of rights: personal rights; rights of property. Inheritance. Obligations ex delicto and ex contractu; Recognition and enforcement of rights; personal relations; property; inheritance; administration of estates; judgments; obligations.

Text: Minor's Conflict of Laws.

XXVI. Legal Ethics.—4 lectures of 2 hours each.

The duty of the lawyer to the courts, attempts to exert influence on courts. The defense and prosecution of persons charged with crime. Representing adverse and conflicting interests. Compensation of attorneys. The lawyer in court, attitude toward court, opposing counsel, and witnesses. Advertising. Stirring up litigation, responsibility for litigation. The lawyer's duty in its last analysis.

Text: Code of Ethics of American Bar Association.

XXVII. Review Course.—2½ hours per week for 14 weeks.
1 hour per week for 24 weeks.

Designed to survey the whole field of the law, it is in a sense the complement of the course on elementary law which initiated the student's work. The leading principles of all branches are thoroughly reviewed, the student's knowledge is tested, and errors and doubts corrected and removed. A great part of the time is necessarily devoted to lecture and discussion by the instructor, but every branch is made the subject of an exhaustive quiz, chiefly by the submission for oral solution of

hypothetical problems involving the principles under discussion. Considerable opportunity is thus afforded for practical work in the analysis of legal problems and in the use of the law library.

Text: Instructor's Typewritten Syllabus.

XXVIII. Practice Court.—2 hours per week for 18 weeks.

Rules of procedure are based on the rules in force in the Circuit Court of Cook County. Statements of actual cases are assigned to the students who are required to institute, prosecute and defend the proper proceedings at law or in equity as the case may be. Occasionally, also, work is assigned in matters of a purely criminal nature. Whilst the members of the Third year class are naturally required to take the leading part in the exercise of the Court, opportunity is afforded all other students, as their progress in the law warrants, to take advantage of the training afforded by the course. At the end of each trial, the presiding judge comments on and criticizes the methods of the students, explaining all points of difficulty presented by the proceedings.

Each student is required before graduation to remove a case from the Practice Court to an Appellate Tribunal; preparing the record, abstract, and briefs substantially as required by the rules of practice in the Appellate Court of Illinois.

Course of Logic, Philosophy and Sociology

This class was organized in October, 1902. It is conducted in connection with the Law Department, meeting Friday evenings from 6:30 to 9 p. m., from September to May, in the Ashland Block.

Its object is to furnish to college graduates, advanced and special students and professional gentlemen, an opportunity to review their philosophy or to make a more thorough and practical study of its fundamental questions, after some experience in practical life will have made them realize their importance. Other gentlemen, though not college graduates nor law students, are admitted to the class if their tastes and previous attainments qualify them to profit by it.

The class exercises consist of lectures and discussions on the chief points of Logic, Psychology, Ethics and Sociology.

Students of the Law Department are admitted without additional fee; others are charged a fee of twelve dollars, payable in advance for the whole course.

Professors: Rev. Frederic Siedenburg, S. J.
Rev. Patrick A. Mullens, S. J.

The following are outlines of the course:

SOCIOLOGY.

FIRST YEAR.

The Social Problem.—Economic evolution—Liberalism and Socialism. The factors of solution—the individual, the state, the church—Solidarism.

The Labor Question.—Conditions and reforms—relation of employer and employe—wages—strikes—lockouts—boycotts—arbitration and conciliation. Labor Unions and Manufacturers Association—Private reforms—Industrial betterment. Legislative reforms—Minimum wage—Workingmen's Compensation—

Labor hours and Sunday rest—Moral and sanitary environment—woman, child and immigrant labor—Compulsory insurance—death—disability—unemployment. Health, housing and transportation. Co-operative Societies—the small factory and handicraft. Vocational education. Religious influences.

SECOND YEAR.

Commercial and Industrial Problems.—Competition—law of demand and supply. Trusts and Monopolies—economic and social advantages and dangers. Moral and legislative restrictions. Railroad evils and government ownership. Interstate Commerce and Federal Control. Currency legislation, profits, rents and interest.

Problems of Government.—National and local—poverty and pauperism and crime. Tuberculosis and occupational diseases. Social and Sex Hygiene. The social evil and white slave traffic. Charity and Philanthropy defectives, dependents and delinquents. Modern methods of investigation, interpretation and treatment.

The Agrarian Problem.—Conditions and objects of reform. Social agencies and agricultural schools. Scientific and monetary government aid. Back-to-the-land movement and Colonization of Immigrants. Preservation of National resources.

The Woman Problem.—The general movement—woman's place in society—her present condition—Suffrage and reform. Woman in industry and domestic service. Higher, Vocational and co-education. Christianity and the exaltation of woman.

LECTURES ON MORAL PHILOSOPHY.

A course in general and special ethics with particular application to legal practice.

Definition; Scope; Object-matter; Relation to other sciences; Postulates.

The human act; Knowledge and free-will; Obstacles to voluntariness of acts; Imputability.

The end and the good; The last end; The real and apparent good; The highest good; The pursuit of happiness.

Moral good and moral evil; The essence of morality—False views: Positivists, Utilitarians, Sensists, Rationalists;—Moral Realism; The determinants of morality.

Law-Requisites for a moral law; The eternal law; The natural law—Its properties; Ultimate basis of obligation—Relation to positive law.

The proximate, subjective form of morality—Moral Conscience—Probabilism.

Moral power and moral obligation—Rights and duties—Basis, connotation, distinction—The so-called rights of animals—Collision of rights.

Duties to God—Religious worship, interior and exterior, private and public.

Duties in respect of self—Extremes of Egoism and Altruism. Personal duties regarding the soul, the body, external goods—Reputation, liberty of action, material possessions. Suicide. Veracity and the obligation of keeping secrets. Duties to others—To respect their rights to health, integrity physical and moral, life, reputation, property. Neglect of these duties of the violation of corresponding rights. Protection against unjust aggression—The moderation of blameless defense.

The rights of ownership: basis, realization, titles. Socialism, Society, conjugal, parental, industrial, civil. Unity and indis-

solubility of matrimony. Parental right in education. Employer and employee.

Nature and origin of civil society. The social compact. Nature of civil authority, origin; Designation of governing power. Functions of government, legislative, judicial, executive. The right of the sword—Capital punishment. War.

LEGAL ETHICS.

Qualities of law. Their enactment, application, enforcement. Qualifications of legislators; Justice and expediency primary considerations in passing of laws; Unnecessary multiplication of statutes. Caution against retroactive laws.

The dignity of Judge's office. Requirements. Ordinary function. Doubt, in civil cases, in criminal cases. Self-protection against the attempt to influence or corrupt.

The Lawyer's duty toward the profession—knowledge required; what he owes to the Court, opposing counsel, client. The undertaking of doubtful cases, civil, criminal. Means and method. Fee. A rule of conduct.

Register of Students

THIRD YEAR.

BEAM, HARRY P.....St. Ignátius Academy
BYRNE, CHARLES E., A. B.....St. Ignatius College
CARROLL, T. J.....St. Patrick's Commercial Academy
CONNORS, AMBROSE V.....St. Bede's College
DUFFY, JOHN T.....St. Ignatius Academy
DUNPHY, GERALD J.....St. Patrick's Commercial Academy
ELLIOTT, GLENN J., A. B.....Loyola University
FEATHERSTONE, G. F., JR.....Lewis Institute
FITZPATRICK, J. WARD.....St. Ignatius Academy
GORMAN, ALOYSIUS F.....St. Ignatius College
HASSELL, PAUL.....Southern Collegiate Institute
HURLEY, F. A.....St. Ignatius College
JOHNSON, SWAN M.....Newaygo, Mich., High School
JUHL, CURT.....Royal College, Sonderburg
KILGALLON, JAMES J.....St. Patrick's Commercial Academy
KILLGALLON, MICHAEL R.....St. Ignatius Academy
KOENIG, PAULUS F. B., A. B.....Depauw University
MARTIN, PHILLIP J.....Cathedral College
MULDNER, GEORGE F.....Cleveland High School
MCMANUS, JAMES P.....St. Mary's College, Kas.
O'CONNOR, JOHN F.....De Paul Academy
O'DONNELL, RICHARD, A. B.....Loyola University
PHILBIN, J. FAY.....St. Ignatius Academy
QUINLAN, PERRY.....Loyola Academy
QUINN, EDWARD J.....St. Ignatius Academy
QUINN, HARRY A.....St. Ignatius Academy
REGAN, RICHARD H.....St. Ignatius Academy
SMITH, THURBER M., A. M.....St. Mary's College, Kas.

STACK, THOMAS J.....St. Patrick's Commercial Academy
STEFANEK, ANDREW G.....St. Procopius College
TREMKO, MICHAEL.....St. Procopius College
WAUGH, WILLIAM F.....Utah Agricultural College

SECOND YEAR.

BIDWILL, CHARLES W.....Lewis Institute
BEIRO, FERNANDO, JR.....St. Paul's College, Porto Rico
BLANK, PETER.....Commercial High School, Odessa
BROWN, JAMES L.....Oak Park High School
BURKE, WILLIAM D.....Kewaunee High School
BURNS, JOHN S.....Niagara University
BYRNE, JAMES.....St. Ignatius Academy
CLOHESY, WARREN A., A. B.....Campion College
CONWAY, JAMES.....Cathedral College
CUMMINGS, BERNARD F.....Chicago Kent College of Law
CRIESE, CHARLES.....Oak Park High School
COLNON, AARON, A. B.....Loyola University
COUGHLIN, JAMES J.....De LaSalle Institute
COUGHLIN, JOHN H.....De LaSalle Institute
DOOLEY, WILLIAM G., A. B.....Loyola University
DOWDLE, RAYMOND.....St. Ignatius College
DUNN, T. ELMER, A. B.....Loyola University
FITZGERALD, JAMES, A. B.....Loyola University
FLANAGAN, JOHN.....St. Ignatius College
GARLAND, ROBERT J., A. B.....Loyola University
GEBEL, PETER F.....De LaSalle Institute
HARDING, JOHN T.....Carl Schurz High School
HENRIQUEZ-GIL, A., A. B.....Valparaiso University
GRANT, THOMAS P.....St. Viator's College
HEALY, J. PAUL.....Detroit College
KANE, FRANKLIN W.....St. Ignatius College
KOCH, RAYMOND J., B. S.....Armour Institute
LAWLEY, WILLIAM F.....St. Ignatius College

LAWSON, LOWELL A.....St. Viator's College
LAYMAN, P. RAY.....Loyola Academy
MARKIM, HARRY.....Smoliensk High School, Russia
MORAZZANI, JOHN IGNATIUS.....St. Paul's College, Porto Rico
MURRAY, EDWARD A.....St. Ignatius College
O'REILLY, C. H.....St. Mary's College, Kas.
RIVERA, FRANCISCO, JR., A. B.....St. Bernard's College, Porto Rico
SHERIDAN, JAMES G.....St. Joseph's Academy, N. Y.
WILLEY, JAMES.....Camden, Ind., High School

FIRST YEAR.

BREMNER, JOSEPH E.....Loyola Academy
BURKE, EDMUND H.....Lane High School
BURKE, JOHN P., A. B.....Loyola University
BURNS, C. J.....Galena High School
DOWDLE, JOHN J., A. B.....St. Mary's College, Kas.
DUNNE, TIMOTHY E.....De LaSalle Institute
ENRIGHT, J. J., JR.....McKinley High School
ESSER, W. G.....Loyola Academy
FENLON, MARTIN J.....St. Kiernan's College, Ireland
FERRY, JOSEPH W.....Fulton, Ill., High School
FOEHRINGER, JOHN F.....Waller High School
FRANEY, WILLIAM URBAN.....De LaSalle Institute
GARDINER, JOHN J.....St. Ignatius College
GLEASON, JAMES H.....Chicago Kent College of Law
GLEESON, PATRICK J.....St. Ignatius College
GROVES, WALTER B.....St. Ignatius College
HANLEY, ROBERT F.....St. Viator's College
HASSENAUER, LEO J.....Blume, Ohio, High School
HAYES, LAMBERT, Ph. B.....Loyola University
HOGAN, WILLIAM.....St. Patrick's High School
JENNINGS, WILLIAM J.....Chicago Kent College of Law
KEELER, LOUIS V.....McKinley High School
KEHOE, JAMES E., A. B.....Loyola University

KELLY, HUGH.....Seattle College, Wash.
LASECKI, JOSEPH ANDREW, A. B.....St. Stanislaus College
LEDDY, GEORGE P.....St. Ignatius College
LOFTUS, L. L.....St. Phillip's High School
MALONE, H. G., A. B.....Duquesne University, Pa.
MILLER, ROGER C.....St. Mary's College, Kas.
MCCARTAN, AUSTIN R.....Fonda, Iowa, High School
MCGLOON, JAMES C.....Chicago Kent College of Law
MCGUINESS, W. J.....De LaSalle Institute
O'CONNELL, ROBERT.....Northwestern University
O'CONNOR, PATRICK T.....St. Viator's College
REILLY, ARTHUR P., A. B.....St. Mary's College, Kas.
ROONEY, GEORGE A.....St. Viator's College
SACKLEY, DYER V.....Mt. St. Mary's College, Md.
WALSH, JAMES P.....Chicago Kent College of Law
WHITE, THOMAS EMMETT.....Marseilles, Ill., High School
WITMANSKI, STEPHEN I.....St. Ignatius College
VAUGHAN, EDWARD.....Englewood High School

Loyola University

School of Sociology

Bulletin No. 6 August, 1916

Announcements 1916-1917

Register 1915-1916

Ashland Block—Sixth Floor
Clark and Randolph Streets
Chicago

Calendar for Year 1916-1917

September 27, Wednesday.....Registration Begins
October 2, Monday.....First Session Begins
October 12, Thursday.....Holiday—Columbus' Birthday
November 30, Thursday.....Holiday—Thanksgiving
December 9, Saturday.....First Session Ends
January 8, Monday.....Second Session Begins
February 12, Monday.....Holiday—Lincoln's Birthday
February 22, Thursday..Holiday—Washington's Birthday
March 17, Saturday.....Second Session Ends
March 26, Monday.....Third Session Begins
April 6, Friday.....Holiday—Good Friday
April 9, Monday.....Holiday—Easter Monday
June 5, Tuesday.....End of School Year

Officers and Faculty

REV. JOHN B. FURAY, S. J.
President of University

REV. FREDERIC SIEDENBURG, S. J.
Dean and Lecturer on Sociology

REV. HENRY S. SPALDING, S. J.
Lecturer on History of Social Reform

REV. PATRICK A. MULLENS, S. J.
Lecturer on Ethics

REV. THOMAS V. SHANNON, S. T. L.
Lecturer on History of Economics

ALFRED DE ROULET, A. M., M. Sc., M. D.
Lecturer on Social Pathology

JAMES FITZGERALD, A. M.
Lecturer on Economics

PHILIP A. GRAU, A. M., LL. M.
Lecturer on Civics and Law

LENORA Z. MEDER, LL. B.
Supervisor of Field Work.

VICTOR YARROS, LL. B.
Lecturer on Local Government

ROSE J. McHUGH, Ph. B.
Lecturer on Family Rehabilitation

M. E. McNALLY
Registrar and Librarian

Extension Lecturers

REV. FREDERIC SIEDENBURG, S. J.
Lecturer on Psychology

MARGARET MADDEN, A. M.
Lecturer on History of Education

KATE MEADE, B. S.
Lecturer on Celtic History

JAMES FITZGERALD, A. M.
Lecturer on English Literature

A. HENRIQUEZ-GIL, A. B.
Instructor in Spanish

Special Lecturers

MARY M. BARTELME
Assistant to Judge of Juvenile Court, Chicago

WILLIAM L. BODINE
Superintendent Compulsory Education, Chicago

A. L. BOWEN
Secretary State Charities Commission, Springfield

KATHERINE M. BRIGGS
General District Secretary, United Charities, Chicago

HELEN M. CRITTENDEN
Registrar, Social Service Registration Bureau, Chicago

HAROLD FRANK CRUNDEN
Lecturer, Chicago Telephone Company

HON. HARRY P. DOLAN
Judge, Boys' Court, Chicago

REV. FRANCIS H. GAVISK
Pres. Nat'l Conference of Charities and Corrections, Indianapolis

WILLIAM HEALY, M. D.
Director, Psychopathic Institute, Juvenile Court

JOHN F. HOGAN
Editor "The Gateway," Detroit

JOEL D. HUNTER
Chief Probation Officer, Juvenile Court

ALEXANDER JOHNSON
Director, Committee for Provision of Feebleminded, Philadelphia

THOMAS J. KELLY, S. J.
Professor, School of Engineering, Loyola University

SHERMAN C. KINGSLEY
Director, Elizabeth McCormick Memorial Fund, Chicago

R. H. LEAVELL
Secretary Big Brothers, Chicago

MARGARET M. LONG
Head, Probation Department, Juvenile Court

OWEN R. LOVEJOY
Secretary National Child Labor Committee, New York

MARIE MAYER
Passion Player, Oberammergau, Bavaria

MAURICE J. MORIARITY
Attorney-at-Law, Chicago

WILLIAM B. NORTON
Religious Editor, Chicago Tribune

EDITH S. REIDER
Welfare Secretary, International Harvester Co.

WILFRED S. REYNOLDS
Superintendent, Illinois Children's Home and Aid Society

ANNA SEATON-SCHMIDT
Lecturer, Boston, Mass.

AMELIA SEARS
Director, Cook County Welfare Bureau

HENRY W. STEWART
Secretary Investigating Committee, Association of Commerce

W. B. TOWSLEY
Superintendent Welfare Work, Marshall Field & Company

CAROLYN C. VAN BLARCOM
Secretary Illinois Society for the Prevention of Blindness

General Information

PURPOSE.

Besides giving a thorough course in the basic principles of sociology the purpose of this school is also to give fundamental and practical courses in civics and social economy, as a preparation for social and charity work of all kinds.

HISTORY.

In September, 1912, the Loyola University Lecture Bureau was organized to give extension lectures of a popular nature on social subjects. During the year over one hundred addresses were given by a staff of special lectures in various parts of the city and the surrounding territory. The interest which these lectures aroused paved the way for systematic courses from October, 1913, to April, 1914. In these courses one hundred and sixty lectures were given, embracing General Economics and Sociology, Social and Legal Ethics, and Social and Industrial Reorganization. Some of the courses were so well attended that the Law School lecture room could not accommodate the attendance, and Schiller Hall was secured. In September, 1914, a permanent school of sociology was established.

LOCATION.

Owing to its location in the heart of a great city, the school is enabled to give an ideal course which combines theory and practice. As many of the lecturers are engaged in social work, they bring to the class room that ex-

perience which is necessary to illustrate the principles and that interest which daily contact with social service inspires. The school co-operates with various public and private civic and social organizations.

THE SCHOOL YEAR.

The curriculum is of two academic years, so arranged that either one or two years may be taken without unnecessary repetitions or want of continuity.

The school year is divided into three sessions, each of ten weeks' duration, beginning the first week in October, and ending the first week in June, with an extended mid-winter vacation. Students are admitted at the beginning of any session. Day courses are conducted every day (except Saturday) from 4:00 to 6:00 P. M. Evening courses, every Friday, from 6:30 to 9:00 P. M.

EXTENSION COURSES.

Besides the regular courses in the School of Sociology, special extension courses of fifty-four lectures each, are given each afternoon from four to six. These lectures offer a cultural background for the sociological courses and may be taken as electives. Credits for these courses may be used towards degrees and for promotion in the public schools.

ENTRANCE REQUIREMENTS.

All candidates for admission must be over eighteen years of age, and must have four years high school education or its equivalent. To this must be added two or more years of recognized college work or practical experience of a nature equivalent to the same. Satisfactory evidence of good character and earnest study must likewise be presented with registration data.

REGULAR STUDENTS.

Regular students are those who take all the day courses and who are candidates for a degree or a Certificate in Social Economy, according to their previous qualifications and college credits. Each student must, during each week, give ten hours to lectures and fifteen hours to field work. The course is completed in two years.

SPECIAL STUDENTS.

Special students are those who take any of the courses offered provided that not less than four lectures per week are attended. College credits towards a degree or a Certificate in Social Economy wil be given for these courses provided the attendance has been regular, and a satisfactory examination made. These credits may be offered for promotion in the public schools.

SCHOLARSHIPS.

Three scholarships for the regular course and five scholarships for the special course are offered for 1916-1917, to students who have college degrees or have exceptional scholarship records. These scholarships are at the disposition of the faculty, and provide free tuition only.

METHODS OF INSTRUCTION.

The methods used are those of lectures at the school, private research, and practical work under the direction of well established social agencies, with expert supervision. Charts, Stereopticon views and Moving Pictures are also used to advantage.

FIELD WORK.

This practice work is of equal importance with the lectures, and hence fifteen hours per week are required from all regular students. The latter are assigned as apprentices to study methods and the technique of treatment to some of the leading public and private civic and social institutions.

VISITS OF INSPECTION.

At stated intervals visits of inspection are made to the different institutions with whose work the student should be acquainted, such as the Juvenile and Morals Courts, the House of Correction, the Good Shepherd Convent, St. Mary's Industrial and Training School, St. Charles School for Boys, Geneva School for Girls, etc.

LIBRARY.

A select library of over one thousand books and pamphlets, treating every phase of socioligical problems, will be at the disposal of special as well as regular students. The Chicago Public Library and the Crerar Library are less than four blocks from the school.

EXPENSES.

For regular students the matriculation fee will be $5.00, and the tuition for each term $20.00. For special students the tuition will be $12.00 for each course of fifty-four lectures, the number of hours required for a major credit.

Tuition is payable in advance at the beginning of each session. Students who fail to obtain a card from the registrar within ten days after the opening of the session will be debarred from the privilege of the classes.

Fees are in no case refunded, but students who have paid tuition and have become unable through sickness or any

other unavoidable cause, to attend, will be credited the amount on any subsequent session which they may attend.

Students will be permitted to take special examinations for the removal of conditions, but will be required to pay a fee of $5.00 for such examination.

All financial obligations must be met before examinations may be taken or diplomas or certificates conferred.

For the benefit of out-of-town students, the following estimates are submitted:

	Low	Average.	High.
Tuition	$ 60.00	$ 60.00	$ 60.00
Board and room	120.00	160.00	180.00
Laundry	15.00	20.00	30.00
Books and stationery	15.00	20.00	30.00
Incidentals	40.00	60.00	80.00

Students may apply to the Registrar for information and direction as to desirable board and lodging.

RESIDENCE IN INSTITUTIONS.

Students of limited means and vigorous health might arrange through the registrar to find residence in one or other of the social institutions of the city. During the Christmas vacation such students might profitably find temporary employment.

Outline of Courses

(For 1916-1917.)

ECONOMICS.

A. 1. Definitions—Methods—Schools—Liberalism—Socialism—Solidarism—Rights of Property—Wealth—Price—Production (nature, labor, capital). Money—origin and functions. Coinage—Bimetallism—Monometallism. Consumption and Distribution — Rent — Profits — Interest — Wages.

A. 2. Credit—Banks and Banking—American and Foreign. Currency laws and federal banks. Emergency Currency. International Commerce. Balance of trade and accounts. Customs and imports. Protection and Free Trade.

A. 3. Transportation—evils and remedies. Private and Government ownerships. Corporations, advantages and limitations. Trusts and monopolies. Restrictions and remedies for evils Interstate trade commission and federal control. Taxation—Revenue—Public Debts. Insurance.

ETHICS.

B. 1. General Ethics—Man, his nature and ultimate destiny. Human actions and the principles of morality. Virtues and passions. Laws—eternal, natural, positive. Civil law and Conscience. Obligation, promulgation and sanction of law. Utilitarianism.

B. 2. Natural Law—rights and duties in general. Duties to God, to self and to fellowman. Religion and self-love. Malice of homicide, lying and theft. Private ownership—

rights—titles and violations. Transfers of rights, land and labor. Right to work and wages.

B. 3. Society in general—domestic society—its rights and duties. Unity and indissolubility of marriage. Divorce, absolute and relative. Education and the State. Civil Society, origin and necessity. Forms and functions of government. Civil sanctions and capital punishment. Tyranny and anarchy. International law.

HISTORY OF SOCIAL REFORM.

C. 1. Primitive reforms—Mosaic laws and regulations. Social activities in Oriental, Greek and Roman history. Christianity and its social value. Communism in the early Church. Social reforms of early popes. Educational and social work of the first religious orders. The parish a training for citizenship.

C. 2. Medieval Reforms—the democracy of the Church. Rise of labor guilds; the position and condition of labor. Technical education of the masses; Universities, public and industrial schools. Hospitals and organized charities. Poverty and wages; health and housing. Old age pension and social insurance. Day nurseries and state loan agencies.

C. 3. Modern reforms. Europe in 17th and 18th centuries. The impoverishment and degradation of the masses. Poor Laws. The industrial revolution and rise of organized labor. Unrest and legislative reforms. Workingmen's Compensation. Compulsory insurance and old age pensions. Law and tax reforms. Health, housing, court and prison reforms.

SOCIAL REORGANIZATION.

D. 1, 2, 3. First principles concerning the family, the individual and the state. Application of Christian principles and practice to modern social conditions and tendencies. Reforms private and civic; purposes and methods

of investigation, interpretation and treatment. Special study of defective, deliquent and dependent wards of the State. The organization and administration of public and private institutions.

INDUSTRIAL REORGANIZATION.

E. 1, 2, 3. The causes and factors of modern labor problems; relations of employer and employee; social and religious aspects of economic questions; the living wage, safe and sanitary labor conditions; Labor legislation; Sunday rest, workingmen's compensation, housing and transportation, immigration, unemployment, social insurance, etc.

SOCIAL STATISTICS AND FIELD WORK.

F. Statistics as a factor in the field of social study. Social resources and liabilities studied in official reports and private investigations. Collection and tabulating of data. Methods of acquiring facts, weighing and interpreting evidence. Particular cases are taken, studied and discussed.

RACE PROBLEMS.

G. Problems of population, political, economic and social causes and effects. Birth and death rates, infant mortality, race suicide, disease, war, alcoholism, eugenics and sex hygiene. Immigration—methods of assimilation and restriction, colonization. Asiatic and negro problems.

THE CHURCH AND SOCIAL SERVICE.

H. The social value of religion. The function of the Church in modern social problems. Relief and preventive agencies of social service in the Church, especially the religious orders of men and women—hospitals, houses of correction, orphanages and asylums. Organizations such as Society of St. Vincent de Paul and others.

HEALTH AND HOUSING.

I. The problems of municipal health, infectious and contagious diseases, public and private hospitals and nursing, water and milk supply; public baths, sewerage and garbage disposal, care of streets and parks; building and housing reforms. Tuberculosis. Social diseases.

PHYSICAL AND PSYCHIC FACTORS IN DEPENDENCY AND DELINQUENCY.

J. Biologic aspects of inferior and anti-social elements—age—sex—disease—heredity — education — environment—race traits and personal habits. General and individual conditions, physical, mental and nervous allied to dependency and delinquency. Private and public methods of reform. Psychopathic institutes. Prison reforms.

CHILD WELFARE.

K. Infant and child welfare in public and private institutions, birth registration, medical inspection and compulsory education. Care of defective, dependent and delinquent children. The child in industry and child labor legislation. Children's aid societies. Recreation—playgrounds and social centers.

PROBLEMS OF LOCAL GOVERNMENT.

L. 1, 2. The sphere, duties and methods of modern local government. Problems of social and civic welfare, with special reference to tenements, health, housing and transportation; the prevention and treatment of crime. City planning and municipal ownership of common necessities.

PROBLEMS OF NATIONAL GOVERNMENT.

L. 3. Centralization and socialization of modern governments. Governmental restraint and control of commerce and manufacture. Economic and social effects of departments of agriculture and labor. Pure food laws—and labor legislation.

Extension Courses

PSYCHOLOGY.

M. Life: Vegetative, Animal, Intellectual. The Vital Principle. Instinct and Reason. Theories of the Ego. Soul—A simple, spiritual substance. Individuality. Union of soul and body. Origin of soul. Creationist and Neo-Scholastic doctrines. Theory of Evolution. Origin of ideas. Psychophysics. Rational appentancy. The free will and determination.

EDUCATION.

N. Modern Period: An introductory study of the period immediately before and after the Protestant Revolution. The Jesuits. Brothers of the Christian Schools and other Religious Orders. Realism. Naturalism. The Scientific, Psychological and Social Movements. Educational Practice. Modern Schools Systems. Present day tendencies.

ENGLISH LITERATURE.

O. A review of the Catholic revival in English letters from the Reformation to the present time. Studies of the lives and works of John Milner, John Henry Newman, Cardinal Manning, Cardinal Wiseman, Coventry Patmore, Aubrey De Vere, Lionel Johnson, Francis Thompson, Cecil Chesterton, Hilaire Belloc, Robert Hugh Benson, Wilfrid Ward, and others together with supplementary critiques of leading contemporary writers.

HISTORY.

P. 1. United States 1787-1860. Emphasis on economic, industrial and social aspects from the making of the Con-

stitution to the Civil War. Framing of the Constitution. Growth of the Revenue System. The struggle for commercial independence. The westward movement. The rise of manufactures. Industrial consequences of the War of 1812. The Slavery Question.

P. 2. Celtic. Influence upon European nations from the introduction of Christianity to the sixteenth century A philosophical study of the causes that led to the religious, political and economic development of modern nations. Special emphasis on Brehon Laws. Saxon and feudal systems of government.

SPANISH.

Q. 1, 2. Elementary. Pronunciation. Elementary Grammar. Translation of Spanish stories based on classical authors. Translation of simple English sentences into Spanish. Study of idioms. Dictation. Conversation.

Evening Courses

ETHICS.

R. 1. General Ethics—Man, his nature and ultimate destiny. Human actions and principles of morality. Virtues and passions. Laws—eternal, natural, positive. Civil law and Conscience. Obligation, promulgation and sanction of law. Utilitarianism.

R. 2. Natural Law—rights and duties in general. Duties to God, to self and to fellow man. Religion and self-love. Malice of homicide, lying and theft. Private ownership—rights—titles and violations. Transfers of rights, land and labor. Right to work and wages.

R. 3. Society in general—domestic society—its rights and duties. Unity and indissolubility of marriage. Divorce, absolute and relative. Education and the State. Civil Society, origin and necessity. Forms and functions of government. Civil sanctions and capital punishment. Tyranny and anarchy. International law.

SOCIAL AND INDUSTRIAL ORGANIZATION.

S. 1, 2, 3. First principles concerning the family, the individual and the state. Application of Christian principles and practice to modern social conditions and tendencies. Reforms private and civic; purposes and methods of investigation, interpretation and treatment. Special study of defective, delinquent and dependent wards of the state. The organization and administration of public and private institutions.

S. 1, 2, 3. The causes and factors of modern labor prob-

lems; relations of employer and employee; social and religious aspects of economic questions; the living wage, safe and sanitary labor conditions; Labor legislation; Sunday rest, workingmen's compensation, housing and transportation, immigration, unemployment, social insurance, etc.

SPANISH.

T. 1, 2. Elementary. Pronunciation. Elementary Grammar. Translation of Spanish stories based on classical authors. Translation of simple English sentences into Spanish. Study of idioms. Dictation. Conversation.

Acknowledgments

The officers and faculty of the School of Sociology acknowledge with thanks the following benefactions:

In memory of Most Rev. James E. Quigley..... Annual Scholarship

The Catholic Woman's League, Chicago. Annual Scholarship

A Friend..... Annual Scholarship

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Illinois State Board of Charities..... Books and Pamphlets

New York Department of Labor.... Books and Pamphets

Massachusetts Department of Labor.. Books and Pamphlets

Miss Agnes B. Clohesy..... Book Case

Degrees Conferred 1916

Margaret Madden, A. M.
Margaret Frances Quinn, Ph. B.
Leon J. Perez de Alarid, B. S.
Cleveland C. MacLane, B. S.
Maurice W. K. Byrne, B. S.
Christo M. Stoycoff, B. S.
Nathaniel Van Voorhis Graves, B, S.

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Organized October, 1915.

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Vice-President.....Margaret Madden, A. M.
Secretary.....Kate Meade, B. S.
Treasurer.....M. Frances Quinn, Ph. B.
Delegate.....Ella R. Connell, B. S.

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Margaret M. Long
Irene Inderrieden
Mary McWhorter
Adelaide M. Walsh, R. N.
Margaret O'Connor
Agnes B. Clohesy
Mazie R. Fugate

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Margaret M. Ahern
Andrew Atteraaen
Adeline H. Bedard
Anna G. Baer
Annie Bell
Sister M. Bernard O. S. D.
Harry Berry
William H. Bohm
Clare Brown
Clarence S. Bucher, M. D.
Catherine A. Burke
William D. Burke
Frank J. Burns
Mrs. Thomas Burns
Maurice W. K. Byrne, B. S., M.D.
Carlotta J. Cardona
Mary B. Carey
Rosa B. Carey
Mary M. Carr
Simon F. Casey
Agnes M. Cavanagh
Agnes B. Clohesy
Philip Clohesy
Rose L. Clohesy
Ella R. Connell, B. S.
Frances D. Conway
Gertrude Corrigan
Helen J. Curley
Elizabeth K. Davlin
Anna Diedrich
Julia A. Dillon
Teresa V. D'Elia
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Thecla Doniat, Ph. B.
Marie W. Downs
Julia M. Doyle, A. B.
Julia R. Doyle
Irene C. Doyle
Minnie M. Doyle
B. Elsie Drake
Margaret A. Duffy
Oliver Eustace
Teresa Finnerty
Catherine E. Fitzgerald
Madolyn Fitzpatrick
Sarah A. Fleming, A. B.
Erina Foote
Catherine Gallagher
Charles A. Gardiner, LL. B.
Margaret L. Garrity
Ella M. Garvey
John C. Gillespie, B. S.
Emma C. Gilmore
Celia M. Gilmore, B. S.
Agatha C. Ginnane
Margaret A. Ginnane
Gretta Glasheen
Nellie F. Glasheen
Helen Gorecki
Nath. Van Graves, B. S., M. D.
Loretta T. Griffin
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Mary A. Guinane
Marie A. Hallinan, Ph. B.
Mary R. Hanlon
Nellie Harper
Ella C. Hart
Blanche Harvey
Louise N. Harvey
Lucille C. Hayes
Gertrude M. Herbert
Nora L. Heffernan
Clara Hellman
Agnes C. Hickey
Ella F. Higgins

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Nora M. Howard
Monica Hyde
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Anna Kearns
Catherine R. Kelly
Hugh D. Kelly
Lauretta F. Kelly
Mary E. Kelly
Elizabeth C. Kennedy
Mary C. Kirwan
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Gertrude F. Liston
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Mary M. Long
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Ella J. Lorden
Jay W. Lowell
Catherine B. Lynch
Agnes Madden
Margaret Madden, A. B.
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M. Irene Malone
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Mary I. Quinn
M. Frances Quinn
Alexander Rackus
Catherine I. Rafferty
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Agnes E. Toomey
Mary E. Twohig
Rose Turk
Marie J. Van Reeth, R. N.
Alicia M. Walsh
Adelaide M. Walsh, R. N.
Elizabeth F. Walsh
Eva K. Walsh
Nellie A. Walsh
Anna F. Waterman
Oliver J. Watry
Carrie E. Wheelan
Della White
Aloysius J. Wojczynski

Total number of students.....212

LOYOLA UNIVERSITY

Department of Engineering

Address: The Registrar or the Dean

Loyola Avenue and Sheridan Road, Chicago, Illinois

Telephone Rogers Park 620

OFFICERS AND FACULTY

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G. Campbell-Chatterton, Assistant Professor of German.
Jeremiah O'Callaghan, S. J., Professor of English Literature.
Edward Helfers, Assistant Professor of German.
James F. Walsh, Professor of Drawing.
John Kokenge, S. J., Professor of German.
Herman Rutenberg, Ph. D., Assistant Professor of Chemistry.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to the College of Engineering must be at least sixteen years of age, must present satisfactory testimonial of good moral character, and must be qualified in fifteen units of entrance subjects as enumerated below.

NOTE.—A unit represents the equivalent of five prepared recitations a week for one scholastic year in a single subject.

The prescribed units are:

English	3 units
History	1 unit
Elementary Algebra	1 unit
Advanced Algebra	½ unit
Plane Geometry	1 unit
Solid Geometry	½ unit
Elementary Physics	1 unit
Total	8 units

Electives sufficient to make up the required fifteen units may be offered from the following list:

Latin	2 to 4 units
Greek	1 to 3 units
German	2 to 3 units
French	2 to 3 units
English	1 to 2 units
History	1 to 2 units
Higher Algebra	½ unit
Plane Trigonometry	½ unit
Elementary Chemistry	1 unit
Biological Science	1 to 2 units
Manual Training	2 units

Admission may be secured in one of the following ways:

1. BY EXAMINATION.—Entrance examinations will be held at the university in June and September. See Calendar.

2. BY CERTIFICATE.—Graduates from standard high schools or other approved preparatory schools will be admitted on presentation of official certificates exhibiting the number of merits to which the applicant is entitled in each subject of the preparatory course pursued.

3. From Other Colleges.—Students from other institutions, whose entrance requirements and courses are substantially equivalent to those of Loyola University, will, upon presenting proper certificates of good standing and honorable dismissal, be admitted to advanced standing without examination and be given credit for the work done in such institutions.

4. As Special Students.—Persons over 19 years of age, not candidates for degrees, will be admitted as special students, provided they give evidence of preparation for the subjects desired. Such students may become candidates for degrees by passing the examinations prescribed for entrance.

FEES AND EXPENSES.

Matriculation fee	$ 5.00
Tuition	100.00
Diploma fee	10.00
Engineering laboratories, per credit, per semester	2.50
Physical and chemical laboratories, per credit, per semester	2.50
Surveying, field work, per semester	3.00
Summer course in surveying, 2 weeks	12.50
Summer course in surveying, 4 weeks	25.00
Breakage deposit (Chemistry)	10.00

The matriculation fee is paid only once. The tuition fee is payable in two installments: $50.00 on October 1st and $50.00 on February 1st; ten days of grace are allowed. At the end of that time non-payment debars from classes.

No rebate is allowed on tuition paid, but when a student is forced, for valid reasons, to withdraw from college, the balance of the tuition representing that part of the semester for which he is absent may be redeemed in any other department studies within one year from date of withdrawal from the college.

Any balance remaining at the end of each year from the deposit required to defray the expense of breakage in the chemical laboratories will be refunded or credited for the succeeding year at the option of the student.

The college provides no dormitory system for students. Board and rooms may be obtained in the vicinity of the college at reasonable rates.

Further information may be obtained from the Registrar or the Dean of the College of Engineering.

LENGTH OF COURSE

For the present Loyola is offering two years of work in the engineering department. The course in these two years is thorough and is arranged to harmonize with the larger engineering schools of the country so that students may pass to other schools to complete the work without inconvenience or loss of time.

An engineering course naturally divides itself into two distinct periods of two years each, the first two years being devoted largely to theoretical work, and the last two to practical questions. With small classes Loyola is prepared to give a better course for Freshman and Sophomore years than can be given in many large universities where the number of students is so large that anything like personal attention is impossible. The deans of larger schools are encouraging the Junior colleges (that is colleges in which the first two years are complete), as they find it impossible to care for the hundreds of young men who enter upon engineering courses.

A course parallel with the Freshman and Sophomore years as given at the University of Illinois has been arranged for with the State University authorities. Students completing such a course at Loyola will be admitted to full Junior standing at the University of Illinois.

The department of engineering is now entering upon its fifth year. Students who have done the first two years at Loyola and who have completed their work at other schools have assured that faculty that their course at Loyola prepared them well for advanced work. The school then has passed beyond the experimental period and can assure its students entire satisfaction in the Freshman and Sophomore years.

COURSES OF STUDY

The outlines of the courses which follow, and the formulation of their requirements, rest on the well founded theory that successful endeavor in any field of engineering activity depends primarily on thorough theoretical and practical training in the fundamental sciences on which modern engineering practice is based. To give such training as may lead to future usefulness on the part of its students, and to develop in them the power to attack and solve new engineering and scientific problems, is the purpose of the instruction offered in the College of Engineering. The work, therefore, in all the courses outlined, is mostly prescribed, and, because of the correlation and interdependence of the professions for which training is provided, a large proportion of the studies—modified in form and extent to meet the general requirements of the individual courses—are taken in common by all students.

Contemporary engineering practice has assumed many phases of specialization within the rather comprehensive fields of civil, mechanical, electrical, and chemical engineering in the general acceptation of the terms. No one may hope to become expert in more than a very few of the various lines classified under one or another of these broad divisions. Though specialized practice is the order of the day, it is very generally recognized that extreme latitude in the election of special technical studies, in connection with the courses offered, is not conducive to sound engineering education, and tends to defeat the real purpose of engineering training. There are therefore included as elective only a comparatively small number of such special technical subjects as are admittedly valuable in affording desirable general scientific training and promoting immediate average efficiency along broad lines of professional activity.

Frequent visits of inspection, according to prearranged schedule under the guidance of instructors, will be made to convenient manufacturing and industrial establishments, power plants, public works, the sites of important pieces of construction, and other

points affording opportunities for stimulating the student's interest and increasing his knowledge. Such visits, besides familiarizing him in a general way with the significance of productive and constructive engineering and lending themselves to his acquirement of exact habits of observation, will afford a basis for written work in which rhetorical and technical instruction may be advantageously combined.

In line with the foregoing, the work in all the courses is identical during the first year, and there is little divergence during the second year. The student is thus afforded an opportunity for self-adjustment, and the danger of premature choice of profession, which is a factor to be reckoned with, is decreased; but he will have become habituated to the scientific methods of thought and procedure so important in the prosecution of his further studies.

OUTLINE OF COURSES

FRESHMEN YEAR—COMMON TO ALL COURSES.

	First Semester.	Second Semester.
English	3	3
Logic	2	0
German or French	4	4
Chemistry	3	3
Drawing and Descriptive Geometry	3	3
Advanced Algebra	3	0
Trigonometry	3	0
Analytical Geometry	0	5
Elementary Surveying	0	3
	21	21

Surveying ..... 2 weeks
Shop work ..... 8 weeks

CIVIL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Drawing	3	2
Geology	3	0
Economics	2	0
Advanced Surveying	0	4
Technical Mechanics	0	5
	21	21

Topographic Surveying ..... 4 weeks
Shop or field work ..... 6 weeks

MECHANICAL AND ELECTRICAL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Analytical Chemistry	3	0
Machine Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	6
Technical Mechanics	0	5
	21	21

Shop work ..... 10 weeks

CHEMICAL ENGINEERING

SOPHOMORE YEAR.

Physics	5	5
Calculus	5	3
Differential Equations	0	2
Quantitative Chemistry	3	3
Drawing	3	0
Geology	3	0
Economics	2	0
Kinematics	0	3
Technical Mechanics	0	5
	21	21

Shop work.....10 weeks

DESCRIPTION OF COURSES

ENGLISH.

The object of the instruction is to enable the student to express himself clearly, concisely, accurately, and vigorously, special stress being laid on those parts of rhetoric which will be of greatest value to engineering students. The written exercises are designed to accord with the other work of the courses. Students are instructed in the use of the library collections.

1. A course in rhetorical theory and practice, with essays based on the lives of distinguished scientists and visits of inspection.

Freshman; 1st semester; 3 credits.

2. A continuation of course 1, with essays based on assigned technical readings and visits of inspection.

Freshman; 2nd semester; 3 credits.

3. A conditional course supplementing the work of 1 and 2, and consisting wholly of theme work and consultation.

Required only of students who show inability to write clear and correct English. It will be continued until a satisfactory degree of proficiency is attained.

FRENCH AND GERMAN.

All students are required to take one year of work in either French or German. Elementary and advanced courses will be offered in each and the student may elect either. For outlines and descriptions of these courses see Bulletin of the College of Arts and Sciences.

MATHEMATICS.

1. Advanced Algebra.—A brief review of the foundations with graphic representation and of the theory and use of logarithms, followed by a treatment of permutations and combinations, theory of limits, series, undetermined coefficients, determinants, theory of equations, complex numbers.

Freshman; 1st semester; 3 credits.

2. Trigonometry.—The trigonometric functions and their relations; proofs of the principal formulas of plane trigonometry; proofs of formulas and solution of all cases of right and oblique plane triangles; computation of areas.

Proofs of principal formulas of spherical trigonometry; formulas and solutions for right and oblique spherical triangles.

Freshman; 1st semester; 3 credits.

Numerous dependent problems and applications.

3. Analytic Geometry.—Graphic representation; the straight line; conic sections; higher plane curves; the essentials of Solid Analytic Geometry. Considerable problem work is required.

Freshman; 2nd semester; 5 credits.

4. Differential and Integral Calculus.—The direct and inverse operations are carried on in parallel. The fundamental formulas and methods of differentiating and integrating are followed by a geometric treatment of maxima and minima; applications to curves, surfaces, and volumes are considered. Taylor's Theorem and the subject of series in general will be treated in the second semester, together with the applications of the calculus to the engineering sciences. Some attention will be given to the subjects of Hyperbolic and Elliptic functions. Considerable problem work is exacted.

Sophomore; 1st semester, 5 credits; 2nd semester, 3 credits.

5. Differential Equations.—The purpose of the course, which is supplementary to course 4, is to familiarize the student with the types of equations ordinarily encountered in the study of the engineering sciences, and to indicate the principles and methods employed in their solution. The solution of numerous problems will be made a leading feature of this course.

Sophomore; 2nd semester, on completion of course 4; 2 credits.

GEOLOGY.

1. General Geology.—A presentation of the general principles of geology and their practical applications. The course will be arranged with special reference to the needs of engineering students. Occasional excursions will replace laboratory practice. Three lectures and one laboratory period per week.

Sophomore; 1st semester; 3 credits.

ECONOMICS.

1. Elements of Economics.—A general survey of economic theory and a discussion of present-day economic problems including wages, rent, interest, currency, banking, taxation, tariff, trusts, trades-unionism, socialism. Lectures and classroom discussions.

Sophomore; 2nd semester; 2 credits.

PHILOSOPHY.

1. Logic.—Formal logic or dialectics; definition, material and formal elements, kinds of reasoning, how to build an argument, analytic and synthetic methods. Material logic: truth, its nature and kinds, certitude, skepticism, cognoscitive faculties, authority, etc.

Freshman; 1st semester; 2 credits.

2. Psychology and Ethics.—Nature and properties of the human soul, cognoscitive faculties, intellect, will, liberty. General ethics, human action, morality, form of human action, divine and human laws. Applied ethics, rights and duties, right of property, socialism, society, law, etc.

PHYSICS.

1. General Physics.—A general course in the subjects of Mechanics and Heat; Light and Sound; Electricity and Magnetism. The methods of the calculus are employed to a considerable degree. Two lecture-demonstrations, two recitations, and two laboratory periods per week.

Sophomore; throughout the year; 5 credits per semester.

2. Physical Measurements.—A laboratory course, supplemented by twelve lectures on the theory and methods of precise thermal and electrical measurements, involving quantitative work in the use of various instruments of precision, and the determination of physical constants. A report of specified form is required on each experiment.

Elective; throughout the year; 2 credits per semester.

3. Practical Photography.—The principles and processes of dry plate photography, including lectures on photographic optics and laboratory work in the exposure and development of dry plates; printing processes, copying, enlarging, and the making of lantern slides.

Elective; second semester; 2 credits.

DRAWING AND DESCRIPTIVE GEOMETRY.

Note.—The freshman work in drawing and descriptive geometry is given as a combined course, but, in the cases of special students or of those admitted to advanced standing, separate courses may be given as follows:

1. Elements of Drawing.—Freehand lettering; sketching and dimensioning; geometrical construction; orthographic projection and isometric drawing; working drawings, including conventions, standards, etc.; tracing and reproductive processes. Notes and lectures on drafting room methods.

Freshmen; 1st semester; 3 credits.

2. Descriptive Geometry.—The descriptive geometry of points, lines, planes, surfaces, and solids. Tangencies, intersections, and developments. Shades and shadows and the principles of linear perspective. One lecture or recitation and two drafting periods a week.

Freshmen; 2nd semester; 3 credits.

MECHANICS AND HYDRAULICS.

1. Technical Mechanics.—The principles of Statics, Kinematics, and Kinetics, with technical applications. Analytic and graphic methods are used concurrently in the solution of problems.

Sophomore; 2nd semester; 5 credits.

2. Resistance of Materials.—A study of the more important materials of construction, their manufacture, properties, and structural uses, and the theory of resistance to stress and deformation with applications to engineering design. Lectures and recitations.

Elective; 1st semester; 5 credits.

CIVIL ENGINEERING.

1. Elementary Surveying.—Lectures, recitations, field and office work covering the principles, uses, and adjustments of the engineer's level and transit, and the uses of the steel tape; topographic surveying with transit and stadia.

Freshmen; 2nd semester; 3 credits.

2. Advanced Surveying.—The application of the fundamental operations to city, land, mine, and hydrographic surveying; the use of the plane table and sextant; precise leveling and triangulation; including the measurement of base lines and angles; the determination of azimuth by solar observation. Lectures, recitations, field and office work.

Sophomore; 2nd semester; 4 credits.

3. Summer Surveying.—The Summer courses in surveying are given at the close of the school year in June and are of a practical nature. The student will spend ten hours a day in the field or office in the performance of the various duties incident to the work of the surveyor. The courses in Elementary and Topographic Surveying are prescribed. The course in Railway Surveying and Location is optional. The periods allotted to these courses are two weeks for Elementary Surveying, and four weeks each for Topographic and Railway Surveying.

4. Topographic Drawing.—The conventional methods of representing topography and the platting of the results of surveys.

Sophomore; 2nd semester; 2 credits.

5. Construction Drawing.—Stereotomy, dams, piers, arches, trestles, culverts, etc. Applications of Descriptive Geometry to engineering construction.

Sophomore; 1st semester; 3 credits.

6. Railway Engineering.—Lectures, recitations, field, and office work dealing with the subjects of railway location and construction. The theory of simple, compound, and transition curves, cross-overs, frogs and switches, turnouts, etc. Cross sectioning, the computation of cut, fill and haul; road bed construction, including ballast, track, culverts, trestles, etc. Estimates and costs.

MECHANICAL ENGINEERING.

1. Machine Drawing.—A continuation of Drawings 1 and 2, and the application of their principles to machine drawing and empirical design. Sketching and detailing machine elements from model and copy; the making and use of standard data sheets; detail assembly drawings of complete machines. The work is designed to familiarize the student with commercial drafting room practice, and is of distinctly vocational character.

Sophomore; 1st semester; 3 credits.

2. Kinematics of Machinery.—Lectures and recitations on the theory of mechanisms, instant centers, cams, gears, linkage, velocity and acceleration diagrams, etc.

Sophomore; 2nd semester; 3 credits.

3. Kinematic Drawing.—The graphic application of the principles of course 2. A series of separate problems of graded complexity will be assigned to each student.

Sophomore; 2nd semester; 3 credits.

3a. Kinematics.—A combined lecture, recitation, and drafting room course briefer than 2 and 3, and arranged to satisfy the requirement in the principles of mechanism for chemical engineering students.

Sophomore; 2nd semester; 3 credits.

CHEMISTRY AND CHEMICAL ENGINEERING.

1. General Chemistry.—Entrance Chemistry, if offered, will not be accepted as the equivalent of this course.

Two lecture-demonstrations, one recitation, and one laboratory period, covering the fundamental principles of the science, the chemistry of the non-metals, and metals and the elements of qualitative chemical analysis.

Freshmen; throughout the year; 3 credits.

2. Qualitative Analysis.—The laboratory work will be varied to some extent according to the course pursued and will include analyses of alloys, rocks, minerals, slags, mattes, and other compounds or mixtures. One lecture or recitation and three laboratory periods per week.

Sophomore; 2nd semester; 3 credits.

3. Quantitative Analysis.—An introductory course consisting of one lecture and three laboratory periods per week devoted to volumetric and gravimetric determinations, including practice in the calibration of flasks and burettes, acidimetry and alkalimetry, chlorimetry, and the analysis of simple compounds and ores.

Sophomore; 2nd semester; 3 credits.

4. Organic Chemistry.—Two lectures and one recitation on the general principles and theories of organic chemistry and the methods of preparation and characteristic reactions of organic compounds with a correspond-

ing laboratory course of three periods per week. A limited amount of work along special lines or organic chemistry may be elected.

Sophomore; throughout the year; 5 credits.

EXAMINATIONS

Examinations are held semi-annually at the end of each semester. The work done during the semester, as well as the examinations, is considered in the grading of students. The results of the examinations are expressed on the basis of 100.

70 is required for passing; 60-70 indicates a condition; below 60 shows failure. Regularity of attendance at lectures and laboratory, and faithfulness in the performance of daily work are of as much weight in determining the standing of students in their classes as are the examinations.

Conditions.—Conditioned students must remove such conditions at the examinations given for that purpose during the following semester. Failing in this the student is obliged to discontinue the subject in which he is conditioned and to repeat it during the next semester.

For a special examination of this kind a fee of $1.00 is charged.

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